- 1 {York Stenographic Services, Inc.}
- 2 RPTS BURKETT
- 3 HIF115.140
- 4 ``SECURING OUR NATION'S PRESCRIPTION DRUG SUPPLY CHAIN''
- 5 THURSDAY, APRIL 25, 2013
- 6 House of Representatives,
- 7 Subcommittee on Health
- 8 Committee on Energy and Commerce
- 9 Washington, D.C.

10 The Subcommittee met, pursuant to call, at 10:01 a.m., 11 in Room 2322 of the Rayburn House Office Building, Hon. Joe 12 Pitts [Chairman of the Subcommittee] presiding. 13 Members present: Representatives Pitts, Whitfield,

- 14 Shimkus, Murphy, Blackburn, Gingrey, Lance, Cassidy, Guthrie,
- 15 Griffith, Ellmers, Upton (ex officio), Pallone, Dingell,
- 16 Capps, Schakowsky, Matheson, Green, Butterfield, Barrow,

Christensen, Castor, Sarbanes and Waxman (ex officio). 17 18 Staff present: Clay Alspach, Chief Counsel, Health; 19 Paul Edattel, Professional Staff Member, Health; Sydne 20 Harwick, Legislative Clerk; Robert Horne, Professional Staff 21 Member, Health; Carly McWilliams, Professional Staff Member, 22 Health; Andrew Powaleny, Deputy Press Secretary; Chris 23 Sarley, Policy Coordinator, Environment and Economy; Heidi 24 Stirrup, Health Policy Coordinator; Tom Wilbur, Digital Media 25 Advisor; Jean Woodrow, Director, Information Technology; Alli Corr, Democratic Policy Analyst; Eric Flamm, Democratic FDA 26 Detailee; Elizabeth Letter, Democratic Assistant Press 27 28 Secretary; Karen Nelson, Democratic Deputy Committee Staff 29 Director for Health; and Rachel Sher, Democrat Senior 30 Counsel.

31 Mr. {Pitts.} Ten o'clock having arrived, the 32 subcommittee will come to order. 33 The chair will recognize himself for an opening 34 statement. There is an echo. 35 Members of this subcommittee have been interested in 36 securing our Nation's pharmaceutical supply chain for many 37 years. While some supply chain provisions were included in 38 Title VII of last year's FDA user fee bill, the Food and Drug Administration Safety and Innovation Act, FDASIA, a 39 40 comprehensive track-and-trace package has yet to be finished. 41 Today's hearing will focus on the importance of securing 42 the downstream pharmaceutical supply chain, which includes 43 manufacturers, wholesale distributors, pharmacies, 44 repackagers and third-party logistics providers. 45 In order to ensure that counterfeit or stolen drugs do 46 not enter the supply chain and harm patients, States have 47 passed laws that require, or will require, those involved in 48 the downstream supply chain to keep pedigrees or transaction 49 histories of drugs. Some believe that these differing State 50 requirements should be --

Mr. {Shimkus.} Mr. Chairman, if you would yield for a 51 minute, I just want to let you know, they are trying to fix 52 53 this, so they are working on it. 54 Mr. {Pitts.} Thank you. Some believe that these 55 differing State requirements should be replaced with a 56 reasonable, practical and feasible federal policy. 57 On Monday, Representative Latta and Representative 58 Matheson released a discussion draft to enhance the security 59 of the pharmaceutical distribution supply chain and prevent 60 duplicative or conflicting federal and State requirements. I would like to thank all of our witnesses for being 61 62 here today. I look forward to hearing their thoughts on the draft. 63 64 [The prepared statement of Mr. Pitts follows:]

Mr. {Pitts.} At this time I would like to request 66 unanimous consent for Congressman Latta to participate in 67 this subcommittee hearing. Without objection, so ordered. 68 69 I now yield the remainder of my time to Representative 70 Latta. 71 Mr. {Latta.} Well, thank you very much, Mr. Chairman. 72 I appreciate you having this legislative hearing today on 73 this important issue of securing our Nation's pharmaceutical 74 supply chain. I also appreciate the subcommittee for 75 allowing me to participate in the hearing today. 76 This is an important issue that was brought to my attention when I was first elected to Congress over 5-1/277 78 years ago by concerned stakeholders in Ohio, and I have been 79 working on it ever since. I am pleased the subcommittee is holding a hearing on the issue, and I am honored to be 80 81 leading the effort in a bipartisan effort in this Congress. 82 The pharmaceutical supply chain touches every part of 83 our health care system. It is imperative that we get the 84 structure and the segments of it connected in a safe, secure 85 and effective manner that provides the best protection for

patients. This draft legislation Mr. Matheson and I have 86 87 released on Monday is a commonsense, practical approach to 88 making improvements to the current supply chain while 89 facilitating continued collaboration among all parties before 90 taking the next steps toward the additional requirements. 91 To protect patient safety, this bill would replace the 92 patchwork of multiple State laws and create a uniform 93 national standard for securing the pharmaceutical 94 distribution supply chain, therefore, preventing duplicative State and federal requirements. It would increase security 95 96 of the supply chain by establishing tracing requirements for 97 manufacturers, wholesale distributors, pharmacies and 98 repackagers based on--Mr. Chairman, should I just continue on 99 without the mike?

100 Mr. {Pitts.} Go ahead.

101 Mr. {Latta.} Thank you. It would increase security of 102 the supply chain by establishing tracing requirements for 103 manufacturers, wholesale distributors, pharmacies and 104 repackagers based on changes in ownership. The bill also 105 establishes a collaborative, transparent process between the 106 Food and Drug Administration and stakeholders to study ways

107 to further secure the pharmaceutical supply chain.

108 The timeline put forth in this bill is reasonable and 109 would allow enough time for stakeholders to comply with these 110 new national standards and ensure that through feedback from 111 these stakeholders that the next phase of the process is done 112 efficiently and effectively.

113 There has been significant work done on this issue over 114 the years, and I appreciate all the feedback and suggestions 115 I have received on this bill draft. While this bill is still 116 in draft form, Mr. Matheson and I intend to introduce it in bill form in the coming weeks, and we fully understand that 117 118 California law relating to implementation of an e-pedigree 119 system is quickly approaching. It is imperative that we move 120 this bill swiftly through the committee and then to the House 121 Floor.

I look forward to working with our Senate colleagues on this legislation along with the FDA and all the other interested stakeholders, and I urge the support of this draft legislation soon to be in bill form.

126 Thank you, Mr. Chairman, and I yield back.

127 [The prepared statement of Mr. Latta follows:]

Mr. {Pitts.} The chair thanks the gentleman and now recognizes the ranking member, Mr. Pallone, 5 minutes for an opening statement.

Mr. {Pallone.} Thank you, Chairman Pitts. I am pleased 132 133 that we are having this hearing today because drug 134 distribution security is critical to public health and 135 safety. The public deserves the piece of mind that the 136 prescriptions they pick up contain quality ingredients and were handled throughout the supply chain by licensed 137 companies adhering to strong safety standards so that the 138 139 final products they receive are safe and effective drugs. 140 U.S. companies providing drugs to other international 141 markets have already begun to serialize their products to 142 comply with these countries' track-and-trace requirements, 143 and the American people should be afforded the same 144 protections.

Last summer, we had meaningful bipartisan bicameral conversations about this topic. While we were ultimately unable to reach an agreement, the discussions with our Senate counterparts and a number of stakeholders certainly

149 demonstrated our commitment to the issue. As we revisit drug distribution security, there is a lot at stake, and that is 150 151 why I am disappointed that we were not given the opportunity 152 to work with our Republican colleagues on the draft bill that was released earlier this week. I am also concerned that 153 154 this draft seems to me to not reflect where our discussions 155 left off last year. Mr. Chairman, as we move forward, I urge 156 the subcommittee to make sure we get this proposal right and 157 that we work together to get there.

Now, some States such as California have already begun 158 to address drug distribution security to ensure the safety of 159 160 their patients. It is crucial that if we are going to 161 preempt these State efforts, that we must have a strong federal standard. This standard should serve as a true 162 163 building block to track drugs at the unit level so that each 164 and every product is authenticated at the lowest unit of sale before they reach patients and counterfeit or contaminated 165 166 products are eliminated. We cannot rely on Congress to 167 revisit this issue in 10 years. The time to establish this path forward and set up phase-in requirements is now. 168 169 It is also important that everyone who is part of the

170 system including the manufacturers, the repackers, the 171 wholesale distributors, third-party logistics providers and 172 dispensers play a role in tracing the safety of the Nation's 173 drug supply. In addition, I believe that in order to establish the 174 175 most effective drug security system, it is critical that we 176 include strong national license standards for distributors 177 and third-party logistics providers so that only reliable 178 companies are handling the Nation's drug supply, and FDA has 179 immediate access to needed company information in the event

180 of a drug recall or other public health threat.

181 I want to thank our witnesses here today including the FDA for all your hard work throughout this process. Many of 182 you contributed to the discussions last year in a productive 183 184 way to educate us on the supply chain process, and I look 185 forward to better understanding what you believe is 186 critically important to any bill that moves forward, and I 187 want to extend a special welcome to Mr. Michael Rose, who is 188 here testifying from Johnson and Johnson, which is 189 headquartered in my district. I look forward to J&J and all 190 the stakeholders as well as my committee colleagues to

191	achieve a reasonable solution that will safeguard the public
192	health.
193	I would like to yield the remaining 2 minutes of my
194	time, Mr. Chairman, to our chairman emeritus, the gentleman
195	from Michigan, Mr. Dingell.
196	[The prepared statement of Mr. Pallone follows:]

Mr. {Dingell.} Mr. Chairman, I thank you for these hearings. I commend you and also my dear friend, Mr. Pallone. I want to commend Mr. Latta and Mr. Matheson for their leadership on this, which has been a long thorn in the side of this committee, being very, very difficult to achieve our purposes.

I would observe that we have before us an opportunity where the two parties are working together, where the House and Senate are working together, and I am delighted to see that that is happening because there is no real Democratic or Republican way of protecting the American public.

209 We have to work with all the stakeholders, and I have to 210 observe that the pharmaceutical industry and the stakeholders 211 have been most helpful in the matters as they have gone 212 forward, and I want to thank again Mr. Latta and Mr. Matheson 213 for their work on these matters. I am hopeful that we will 214 be able to move forward toward legislation that will be 215 accepted and acceptable to all parties, and I note that the industry has been working closely with us as has the Senate. 216 217 It is my hope that we will understand that 10 years on some

218	things within this matter might be a bit long, and I think
219	that while we do need to see to it that Food and Drug has
220	clear instructions from the Congress, we don't want to get to
221	the point where we are micromanaging things and having
222	meetings set up by Food and Drug which may or may not be of
223	value to the country and to the industry and the consumers.
224	Having said those things, I would return 22 seconds to
225	my dear friend from New Jersey, who has been so gracious as
226	to yield to me.
227	[The prepared statement of Mr. Dingell follows:]

229 Mr. {Pitts.} The chair thanks the gentleman and now 230 recognize the chairman of the full committee, Mr. Upton, for 231 5 minutes for opening statement.

The {Chairman.} Well, thank you, Mr. Chairman, and hopefully the mike will work long enough before our helium bill gets to the Floor.

I appreciate today's hearing, and that is for sure, on securing the prescription drug supply chain. Keeping our prescription drugs safe is certainly a bipartisan issue, and we have got the world's safest drug supply, but that doesn't mean we can't make it even better.

240 I would like to thank the discussion draft's authors for 241 their bipartisan leadership on this very important issue. 242 Earlier this week, as has been noted, a comprehensive 243 discussion draft was released that would increase the 244 security of the supply chain for America's patients while at 245 the same time preventing duplicative federal and State 246 The draft also sets forth a collaborative requirements. process so the Food and Drug Administration and supply chain 247 stakeholders could work together in an effort to better 248

249 understand how and when to move to unit-level traceability. 250 We spent a significant amount of time working on this 251 issue as we successfully moved the Food and Drug Administration Safety and Innovation Act through the 252 legislative process in 2012 and our efforts continued beyond 253 254 enactment. During that process, we also sought input from 255 stakeholders like Pfizer and Perrigo, two important companies 256 in my district in Michigan, as well as our small pharmacies. 257 The hard work allowed us to better understand the issue, and the bipartisan discussion draft reflects that understanding. 258 Now it is time to move this legislation down the field and 259 260 across the goal line. We have a lot of good friends in the 261 Senate that agree with us on that sentiment, and this is 262 certainly a priority for this committee to get done, and I 263 look forward to embarking on that, and I yield to Dr. Gingrey 264 and then to Ed Whitfield.

265 [The prepared statement of Mr. Upton follows:]

Dr. {Gingrey.} I thank the gentleman for yielding. 267 Mr. Chairman, I am pleased that there has been generally 268 bipartisan acknowledgement that a secure pharmaceutical 269 supply chain is not only necessary for patient safety but 270 271 becoming obtainable and tracking technology continues to 272 improve, and I would hope that the legislation that is 273 ultimately the result of this hearing today will balance both 274 the reality of today's emerging technologies with the 275 flexibility to change as the result of innovation. It is also necessary that we provide a clear and a concise list of 276 277 expectations and directives to all companies up and down the supply chain. Steady industry progress toward increased drug 278 279 security should not be impeded by a lack of clarity from 280 Congress as to the ultimate goal of this legislation for both 281 the sake of innovation and security and for the patients who 282 may be adversely impacted from counterfeit or stolen drugs. 283 Thank you, and I yield the balance of my time to the 284 gentleman from Kentucky, Mr. Whitfield.

285 [The prepared statement of Dr. Gingrey follows:]

287 Mr. {Whitfield.} Well, Dr. Gingrey, thanks so much, and 288 thank you all for having this hearing today, and we certainly 289 appreciate the witnesses being here.

Last week, I attended a forum over at Georgetown University with the title of `Combating the Threat of Counterfeit Pharmaceuticals'', and I really was taken aback by the amount of money being made by organized crime and other groups and entering into the supply chain counterfeit prescription drugs.

Another point that came out, and I am delighted that Mr. 296 297 Latta and Mr. Matheson have introduced legislation at the federal level because we know individual States are moving 298 forth, California, I quess out in the front right now, and I 299 300 think we need to set a federal standard in this issue because 301 I heard a lot of concerns about individual States moving in 302 this area, which can create real problems for the 303 manufacturers, but we want to do it safely, and I really look 304 forward to the testimony of the witnesses today.

305 I would also ask unanimous consent to simply submit into 306 the record a statement from a company called Laser Lock

307	Technologies, if that is acceptable. They are an anti-
308	counterfeiting company.
309	Mr. {Pitts.} Without objection, so ordered.
310	[The information follows:]

312 Mr. {Whitfield.} And with that, I would yield back.
313 [The prepared statement of Mr. Whitfield follows:]

315 The {Chairman.} I just want to end by saying that this 316 is a priority. We intend to start the markup process next 317 month, May, and our goal will be to try and get a bipartisan 318 bill to the President before the August recess. So we are 319 going to work very hard and we appreciate all those that are 320 here to help us achieve that goal.

321 Thank you. I yield back.

322 Mr. {Pitts.} The chair thanks the gentleman and now 323 recognizes the ranking member of the full committee, Mr. 324 Waxman, 5 minutes for an opening statement.

325 Mr. {Waxman.} Thank you, Mr. Chairman.

Today's hearing will examine ways to improve the 326 integrity of our drug supply chain. The entry of falsified 327 328 and substandard drugs into our drug supply chain poses a 329 grave public health threat. Time and again, we have read 330 stories about patients getting drugs that were unsafe or 331 ineffective counterfeits or that were stolen and not stored 332 properly, so no longer worked. Without action, this is a problem that is likely to grow. 333

334 Today, there is a regulatory void at the federal level

because the United States does not have laws requiring the 335 tracking and tracing of pharmaceuticals. So some States have 336 337 stepped in and enacted their own laws. My State, California, has a law that would mandate one of the most robust pedigree 338 systems in the country. Many have suggested there is a need 339 340 for a single federal system that would preempt these State 341 laws. I believe having a system at the federal level makes 342 sense, if done correctly. But I have grave concerns about 343 preempting a strong State law like California's and replacing 344 with one that is not as effective at the federal level. 345 Our fundamental goal in establishing a federal system

346 should be to prevent Americans from being harmed by 347 counterfeit and substandard medicines. If we cannot assure 348 the public that legislation would accomplish that goal, then 349 it is not worth doing.

Throughout last year, members on a bipartisan, bicameral basis engaged in extensive discussions about how best to protect our supply chain. I was part of this group, as was Chairman Upton and Representatives Pallone, Dingell, Matheson and Bilbray. We heard loud and clear from FDA, Pew and others that if we want a secure drug supply chain, we need an

electronic, interoperable unit-level tracking system that can identify illegitimate product in real time so that it does not end up in the patients' hands. We also heard that creating this kind of system is doable. In fact, it is already being done in China, as we will hear today from one of our witnesses.

362 Last fall, the bipartisan, bicameral group issued a 363 proposal that although far from being complete, reflected 364 agreement about the need for assuring that we ultimately get to a unit-level electronic system. And just last week, the 365 Senate distributed a draft bill built upon that proposal and 366 made a concerted effort to address issues that were raised on 367 both sides of the aisle throughout last year's discussions. 368 Unfortunately, the House discussion draft under 369 370 consideration here today doesn't take that approach. The bill 371 does not require an electronic, interoperable unit-level 372 Instead, it provides that in ten years, FDA and GAO system. 373 would make recommendations to Congress about what legislation 374 should be enacted to better secure the supply chain. And even though we never get to a unit-level electronic system, the 375

376 House bill would preempt State law on day one. That is

unacceptable to me as a California member, but it should be 377 unacceptable to all members. We know how long it has taken 378 379 Congress to act thus far. The discussion draft preempts strong State laws and puts a weak federal program in its 380 place. That is a step backwards for public health. 381 There 382 simply is no reason to wait to put enforceable standards in 383 place. We have been told repeatedly, and I am confident we 384 will hear today, that in order to secure our drug supply 385 chain, we need to track products at the unit level using an interoperable, electronic system. We fail to protect the 386 Nation's public health if we do not take this step. I yield 387 388 back the balance of my time.

389 [The prepared statement of Mr. Waxman follows:]

391 Mr. {Pitts.} The chair thanks the gentleman. That 392 concludes the opening statements of the members. 393 We have two panels before us today. On our first panel, we have Dr. Janet Woodcock, Director of the Center for Drug 394 Evaluation and Research at the U.S. Food and Drug 395 Administration. Welcome. Thank you for coming today. You 396 will have 5 minutes to summary your testimony. Your written 397 398 testimony will be placed in the record. You are recognized 399 now for 5 minutes.

400 ^STATEMENT OF DR. JANET WOODCOCK, DIRECTOR, CENTER FOR DRUG 401 EVALUATION AND RESEARCH, U.S. FOOD AND DRUG ADMINISTRATION

402 } Dr. {Woodcock.} Thank you, and good morning Mr.
403 Chairman, Ranking Member, members of the subcommittee and

404 authors of the discussion draft.

405 We are all seeking the best way to protect patients from 406 medicines that aren't what they pretend to be. That is why we are here. Or that may cause harm to them without 407 providing the help that they expect from their medicine, and 408 409 that is the goal we want to achieve mutually. So I thank you 410 for continuing to work on this program. We hope to do this 411 by strengthening the safety net that we currently have in 412 place for medicines so that counterfeit drugs can't get in 413 the drug supply because right now there are some loopholes 414 where they can enter the drug supply, and they are. Diverted 415 or stolen drugs can't reenter the drug supply after being 416 perhaps taken by criminals and stored in unsafe conditions, and suspect products that happen to get in can be rapidly 417 identified and removed from the drug supply before they get 418

419 to patients. And additionally, we need to be able to find 420 drugs wherever they are in the supply chain. If dangerous 421 products have been dispensed to patients, we want to be able 422 to find them and get them out of the hands before the 423 patients are harmed.

424 And why do we need this? Well, as people have already 425 said, the problems with counterfeits are well documented and 426 actually growing. Around the world, criminal networks are 427 counterfeiting drugs at a growing rate and many countries, their patients in their countries are exposed to very 428 dangerous drugs and even some of the organisms, the 429 430 resistance problems that we are seeing with drug resistance, 431 are partly driven by these counterfeits because people are 432 taking drugs that actually are subpotent that are counterfeit 433 drugs. And we are seeing this in the United States where often expensive, lifesaving medicines are targeted. I can't 434 435 imagine what it is like for a person battling cancer to hear 436 that they have been receiving a fake therapy or their cancer 437 or for a diabetic to lose blood sugar control because their insulin came from a stolen batch that was improperly stored, 438 439 and these things actually have happened in our country.

440 And there are other equally compelling reasons to strengthen drug track and trace that we haven't really 441 442 discussed as much, and that is to enable recalls of FDAapproved drugs. This is really a non-trivial problem. Over 443 the last 5 years, there have been over 6,500 drug recalls in 444 445 this country. Over 400 of these have been class I recalls, 446 and a class I recall is where our doctors at FDA have 447 determined that there is an immediate risk to health if 448 people would take these drugs, serious risk. And we need to 449 be able to find these recall drugs, as I said, and get them out of the hands of patients rapidly. For example, this has 450 451 happened, there could be a label mix-up and what is labeled 452 as an innocuous drug, perhaps a pain reliever or something, 453 could actually have a dangerous drug such as a blood thinner 454 or cancer chemotherapy drug in that vial, and so if that type 455 of thing happens, we need to be able to rapidly identify the 456 patient who may have these drugs and get them right down to 457 the patient level.

458 So right now, we have a great deal of difficulty finding 459 which patients got these drugs, particularly at the lot 460 level. What we may end up doing is recalling the entire

461 drug, and sometimes these drugs are lifesaving drugs that we 462 don't want to remove completely from the patients; we only 463 want to get the tainted lots. So this is a large and growing 464 problem, and good track and trace would help the entire 465 health care system, people taking care of these patients to 466 secure these products as soon as possible and avoid further 467 harm.

468 And finally, I think and most importantly, I want to 469 say, whatever is put in place by Congress should not fray or weaken the existing safety net. A recent investigation 470 conducted by your colleagues' Ranking Member Cummings of the 471 472 House Oversight and Government Reform Committee and Chairman 473 Rockefeller and Chairman Harkin in the Senate identified a 474 gray market of business that was capitalizing on the way 475 drugs can move through the system to buy up drugs and resell 476 them, perhaps at 1,000 times markup that were in shortage, 477 and desperate hospitals, saying caring for children with 478 cancer had no choice to buy these drugs at this markup 479 because they had to treat their patients. So the existence 480 of that paper pedigree, as noted in the report, enabled them to track back each transaction and figure out the markup and 481

document what actually happened with these shortage drugs. 482 So this paper pedigree right now is a mainstay of us figuring 483 484 out where those drugs have been, not always followed but that is the law that they should have that pedigree and we mustn't 485 weaken that, so I really ask you that any system that you put 486 487 in place not diminish our ability to figure out where these 488 drugs have been. It was astonishing if you read the Cummings 489 report the Murphy trail these drugs followed and their 490 successive markup as they went through multiple hands, none 491 of whom, arguably, had a real interest in getting these drugs to patients. They were simply marked up at each step. 492 493 So we really ask that we not lose the ability to figure 494 out where drugs have been. That is critical, and we recognized that changes will not happen overnight and a 495 496 stepwise process is needed, but it should be expeditious. 497 There are technologies available in various industries that 498 can track things. I order a lot of things online so many of 499 you do too and they are tracked throughout the system. 500 So we have to make sure we strike the appropriate balance between the need to establish a secure system that 501 502 protects the public health and the costs and feasibility of

503 such a system and we need to make sure we put something in 504 place, I think, that evolves over time to a common goal that 505 we all have is a system that prevents criminals from taking 506 advantage of our patients, prevents people from diverting drugs and marking them up, prevents us not being able to 507 508 identify recall drugs and actually people being harmed while 509 we are doing investigations and trying to figure out where 510 these drugs ended up. Mr. {Pitts.} Could you please conclude? 511 512 Dr. {Woodcock.} I am sorry. So our ultimate goal, as yours, is to protect the public from counterfeit, stolen, 513 514 diverted or unfit medications and make sure that we establish

515 a meaningful and enforceable track-and-trace system. Thank

516 you.

517 [The prepared statement of Dr. Woodcock follows:]

519 Mr. {Pitts.} The chair thanks the gentlelady and we 520 will now have questioning, and I will recognize myself for 5 521 minutes for that purpose.

522 Dr. Woodcock, if the FDA has a particular concern that a 523 drug could cause an immediate threat to individuals and the 524 sponsor refuses to take action, what would the agency do? Do 525 you believe that the agency's persuasive authority is strong 526 enough that sponsors will take correction action? Does 527 today's regulatory regime seem adequate given the increase in 528 guantity and sophistication of counterfeiting?

529 Dr. {Woodcock.} Well, we have authorities to--seizure 530 authorities and other authorities that require judicial 531 actions to do. We also, though, usually will go public with 532 our concerns rapidly and start notifying the health care 533 system. It is uncommon but does happen that firms argue with 534 us over recalling drugs or removing them. It is uncommon but 535 can occur.

536 Mr. {Pitts.} Will national uniformity increase the 537 security of the supply chain and improve patient safety? 538 Please explain.

539 Dr. {Woodcock.} An effective system will help secure 540 the supply chain from the incursions that we have seen that 541 probably are a growing threat over the years by criminals, so 542 that will protect patients and probably prevent harm that we 543 have seen.

Mr. {Pitts.} Is it important to preserve the States'
ability to license and enforce national standards?
Dr. {Woodcock.} Obviously, national standards are
useful because of the uniformity because most drugs move
across State lines. So I think it is important that both the
federal government and the States have the ability to enforce
appropriate laws.

551 Mr. {Pitts.} Will product serialization increase the 552 security of the supply chain and improve patient safety, and 553 please explain with your answer.

554 Dr. {Woodcock.} All right. So companies make batches 555 or lots of drugs, okay, and those are large amounts of a same 556 drug. It might be a thousand, it might be a million units 557 would be made. Those are packaged into crates or whatever 558 and sent to distributors, who then send them around the 559 country. At some point those are broken up and then sent to

pharmacies and, you know, all around to hospitals and so 560 forth. At that point that's when incursions by 561 counterfeiters can come in if they simply use the same lot 562 number. The criminals are becoming very sophisticated so 563 they can get a few vials of that lot, they can copy the label 564 565 and put something that is totally fake into the system. So a 566 serialization procedure coupled with some verification at the 567 various levels of distribution would enable us to rapidly 568 identify incursions like that of fake parts of the lot and remove them quickly, and I believe that's why the 569 manufacturers, the pharmaceutical manufacturers, as I think 570 571 you will hear later today, are moving towards serialization. 572 Mr. {Pitts.} Will data exchange and systems between 573 participants in the supply chain increase the security of our 574 drug supply and improve patient safety? And explain with 575 that. 576 Dr. {Woodcock.} Well, you know, I think it is 577 necessary. It gets to what we were talking about earlier 578 about the pedigree. If we don't know the chain of custody of the product, and if we have to reconstruct that later when--579

580 $\,$ say some defective product, dangerous product is found out

there in the hands of a consumer, or worse, they have a side 581 effect which happens, we have to deal with that, and we get a 582 report of serious side effects, then we want to know where 583 did it come from, how many are out there, is it real drug and 584 so forth. And so unless we have that pedigree and we know 585 586 what hands it moved through, and if we have to reconstruct 587 that later by querying people, that will cause great delays. 588 So if you intend to replace the paper pedigree system, it 589 needs to be replaced by something that has capacity to do that tracking back. So we can rapidly identify other people 590 at risk if we get, say, adverse events or report of a 591 592 substandard drug, we can rapidly identify where that came 593 from and how it happened.

594 Right now, we have instances where we get adverse-events 595 report, people die, and we get a large number of reports like 596 this every year for various reasons but some of them might be related to substandard drugs, and we have a very difficult 597 598 time tracking that back from the patient to the pharmacy and 599 figuring out what the patient actually got. So we would really ask that that pedigree, that whatever is established 600 is at least equivalent in performance to the pedigree we have 601

602 now. Mr. {Pitts.} So finally, would a national track-and-603 604 trace standard increase the efficacy of product recalls? Dr. {Woodcock.} Absolutely. That would be a tremendous 605 606 tool for us. 607 Mr. {Pitts.} Thank you. The chair now recognizes the 608 ranking member of the subcommittee, Mr. Pallone, 5 minutes 609 for questions. 610 Mr. {Pallone.} Dr. Woodcock, your written testimony lays out a disturbing series of cases illustrating the risk 611 to our drug supply chain posed by counterfeit and stolen or 612 613 diverted products, and it is not a new problem. We tried to 614 address all the way back in 1987 with the Prescription Drug 615 Marketing Act but for a variety of reasons that didn't work. 616 You described the fact that we need a robust track-and-trace 617 system. I know there are a variety of ways this could 618 potentially, be done and the summary of the House discussion 619 draft indicates that it would require lot-level tracing. 620 Other proposals set up a system that would track at a more granular level at the packaging or unit level. You talked 621 622 about this with questions from the chairman. Can you

describe the differences? I mean, I know you basically have 623 described the differences between the two types of systems 624 but tell me the benefits to a unit-level tracking system that 625 cannot be achieved by the lot level. 626 Dr. {Woodcock.} Right. Well, to reiterate because I 627 628 think this is sometimes unclear, all right, having a unit-629 level tracking means that fake units couldn't be put in, and 630 often there are thousands of them that would be made by a 631 counterfeiter right down to the lot number and inserted into the supply chain somewhere and then distributed to patients. 632 By having that verification down at the unit level, we would 633 know that those were extra, those were illegitimate and they 634 could be rapidly identified and removed. And also it would 635 636 help us, I think, in determining what patients got, what lot 637 they got.

Mr. {Pallone.} I mean, it sounds like the lot level would certainly be better nothing but that the gold standard is the unit level, but it seems to me in order to have an effective unit-level system, it simply has to be an electronic one in which information is exchanged quickly and is available in real time. And I don't think it makes sense

644 over the long term. We would not move beyond a relatively primitive system in which this information is maintained and 645 646 passed with pieces of paper going back and forth. So I recognize that creating an electronic system is no 647 small feat, a lot of technology, time, I am sure, investment. 648 649 But I think we need to ensure that we allow time for an 650 electronic interoperable system be set up. So let me ask you 651 this: do you agree that an electronic interoperable system 652 is ultimately the goal so as long as we allow for enough time to get that kind of a system set up? 653 Dr. {Woodcock.} I agree, because that would provide the 654 greatest protection for our patients. 655 Mr. {Pallone.} Now, my concern is that the House 656 discussion draft does not even set up the goal of an 657 658 electronic interoperable unit-level system. It merely 659 requires that the FDA and GAO report back to Congress in 10 660 years on ways to enhance the safety and security of the 661 pharmaceutical distribution supply chain. If we all agree that our goal should be an electronic interoperable unit-662 level system, we need to spell that out. We need to require 663 that it be the end game and set a date certain when it must 664

be implemented. Congress can play an important role in 665 driving the technology, and as I said, we need to allow for 666 sufficient time for it to develop and we don't want to set it 667 up with unrealistic expectations, but I think we do need to 668 set requirements or it will never happen. So again, Dr. 669 670 Woodcock, do you agree that it would be important for 671 Congress to require that this system ultimately be set up? 672 Dr. {Woodcock.} The goal is ultimately to protect patients and make sure the drug distribution system as drugs 673 are distributed through the system is not porous at different 674 points and has holes or gaps where counterfeits or other 675 676 things can be inserted. So to reach that goal, ultimately you want to have an electronic system that can identify down 677 to the unit level. However, there obviously are logistic and 678 679 timing issues, but I think we all mutually share that goal of 680 patient protection.

681 Mr. {Pallone.} But I am just trying to get you to say--682 I mean, don't you think we should require this at some point, 683 that Congress should require it at some point?

684 Dr. {Woodcock.} Articulating that goal would certainly685 probably speed achievement of the desired end, which is to

have a system that is capable of preventing these incursions. 686 687 Mr. {Pallone.} I appreciate that. I mean, look, you 688 know me. I have been around here for a while, and I just can't say there is a phase I and hope for the best. 689 Ιf Congress wants a phase II, I think they should say. 690 691 Otherwise we are not going to get phase II because inertia 692 unfortunately often characterizes this place unless you spell 693 something out. So I really hope we can work together with 694 our colleagues to improve upon the bill. I think we all share the same goal. We need to better safeguard our 695 Nation's drug supply but we need to make sure whatever 696 697 legislation we enact actually achieves that goal, it doesn't just give people the hope that someday we will achieve it. 698 That is my concern, Mr. Chairman. 699 700 Mr. {Pitts.} The gentleman's time is expired. The chair thanks the gentleman and now recognizes the gentleman 701

702 from Louisiana, Dr. Cassidy, 5 minutes for questions.

Dr. {Cassidy.} Listen, you explained as well as anybody as I have heard it the need for serialization today so I am going to ask some things to explore, not to challenge. As I gather, California has pushed for a more rapid

implementation, but as I gather, they have had to delay this, 707 708 correct? They have had to delay the implementation of their 709 law. Is that true? 710 Dr. {Woodcock.} I am not familiar with what California 711 has done. I am sorry. 712 Dr. {Cassidy.} I have learned to say what I have been 713 told, not what I know, but that is what I have been told, 714 which suggests to me that even in a market as large as that 715 that there could be problems with rapid implementation of 716 this serialization. Dr. {Woodcock.} Well, I think some of your other 717 718 witnesses may be more familiar with the pragmatic aspects of 719 this. Dr. {Cassidy.} Yes, I think really what is a key here 720 721 is not the goal which we should go to serialization, it 722 sounds, but the question is, how do you track supply chain, 723 how do you have in one sense an in-the-cloud inventory where 724 someone is not gaming it to figure out that they need to 725 suddenly purchase because it is about to go in shortage. Fair statement? 726 727 Dr. {Woodcock.} There is one issue. That is right.

Dr. {Cassidy.} And as I gather, those issues have not 728 729 been entirely worked out? 730 Dr. {Woodcock.} No. Dr. {Cassidy.} And so putting a date certain that has 731 to be done in a year presumes that they will be worked out 732 733 within a year but that is clearly not--that is imagining, 734 that is not necessarily knowing that that will occur. 735 Dr. {Woodcock.} Right. Well, clearly there should be a 736 stepwise approach, but whatever is built now should enable 737 the attainment of the ultimate goal, and there should probably be, as Mr. Pallone was saying, some kind of time 738 739 frames put so that everyone's mind is focused on the ultimate 740 qoal. 741 Dr. {Cassidy.} I accept that. There is nothing like a 742 deadline to sharpen a man's mind. I totally get that. On the other hand, I think we have seen with some things like 743 744 the exchanges in the Affordable Care Act just putting a date 745 certain doesn't mean that it is going to smoothly happen, and 746 so knowing everyone is impatient to protect patients from 747 criminals, we still have to recognize there are issues to 748 resolve.

749 Dr. {Woodcock.} Yes.

Dr. {Cassidy.} Let me change gears a little bit and 750 751 talk about drug shortages. You have written a paper. I have 752 had to look over it, the state of the art about the economic factors involved with that, and it seems--no offense--you 753 754 give a little bit of a short shrift to the role of price 755 competition. Knowing that you know this paper like the back 756 of your hand, in figure two you have a little bubble saying price competition as a factor. But it makes sense to me that 757 758 if you have declining margins and a 6-month lag so ASP plus six, the provider can only be reimbursed which was the price 759 760 6 months ago if it has hit this low point, you can try and 761 raise the price, but if the provider is only getting paid the lower price from 6 months, she cannot afford to pay for the 762 763 higher price. Fair statement?

764 Dr. {Woodcock.} Yes, but I am sure you appreciate, I 765 can't really comment on federal--

Dr. {Cassidy.} I understand that, but you can observe that, as your paper does, that lower margins may decrease the ability of a company to invest in manufacturing redundancy, quality, etc. Is that a fair statement?

770 Dr. {Woodcock.} That is a fair statement, and we feel 771 that there is only competition on price because quality is 772 non-transparent to the buyers. 773 Dr. {Cassidy.} Now, theoretically, though, FDA is going 774 to ensure that there is adequate quality to ensure safety, 775 correct? 776 Dr. {Woodcock.} That is our job. 777 Dr. {Cassidy.} Yes, it is your job, and so if I am the purchaser, really, as long as I know that it at least meets 778 779 my minimum standard, why not. 780 Dr. {Woodcock.} Yes, except--and this is what we try to 781 raise in the paper--there is another aspect to quality, which 782 is reliability, which any of you purchase a car or electronic or anything realize is true, and some of that is reliability 783 784 of supply. 785 Dr. {Cassidy.} But if you have concentration of 786 manufacturers, you are down to five, six or seven, really, it 787 is not as if you can go someplace else. 788 Now, let me ask you just in the interest of making this--I understand the numbers of shortages are now down. 789

790 Dr. {Woodcock.} Yes, a 50 percent decrease.

791 Dr. {Cassidy.} Are these shortages down because we have 792 actually addressed these issues of lack of redundancy or 793 because we are allowing more foreign product to be 794 introduced? Dr. {Woodcock.} Primarily because of actions we have 795 796 taken. We thank the Congress for your leadership in dealing 797 with shortages in the Safety and Innovation Act that was 798 passed last year. We have intervened. We have earlier 799 notification. 800 Dr. {Cassidy.} I got 26 seconds. And so is it from more product coming overseas or is it the ability to work out 801 802 things domestically? 803 Dr. {Woodcock.} I don't think the domestic supply has improved. 804 805 Dr. {Cassidy.} So it is actually more product coming 806 from overseas? 807 Dr. {Woodcock.} Yes. 808 Dr. {Cassidy.} Let me toss out one thought. I just 809 spoke to a man who has got extensive contacts with foreign pharmacies. He suggests that you put an RSS feed on your 810 811 website. He says that my guys elsewhere have to constantly

812	monitor what is in shortage. They really can't do that. If
813	there is an RSS feed, look, boom, propathol is going on
814	shortage, and it would feed out to them, then they would be
815	able to come to you and solicit. So can our office follow up
816	with you regarding that?
817	Dr. {Woodcock.} I would be happy to do so.
818	Dr. {Cassidy.} It just seems like a great idea.
819	Dr. {Woodcock.} Yes, good suggestion.
820	Dr. {Cassidy.} Okay. I yield back. Thank you.
821	Dr. {Woodcock.} Thank you.
822	Mr. {Pitts.} The chair thanks the gentleman and now
823	recognizes the ranking member emeritus, Mr. Dingell, 5
824	minutes for questions.
825	Mr. {Dingell.} Mr. Chairman, I thank you for your
826	courtesy.
827	Dr. Woodcock, you know that there is a lot to be done
828	here so I will ask that you respond with a yes or no to my
829	questions. Do you agree that a traceability system would
830	help to better secure our drug supply chain from
831	counterfeits, theft and intentional adulteration? Yes or no.
832	Dr. {Woodcock.} Yes.

Mr. {Dingell.} Do you agree that a traceability system 833 would help identify and detect illegitimate pharmaceuticals? 834 835 Yes or no. Dr. {Woodcock.} Yes. 836 Mr. {Dingell.} Do agree that a traceability system 837 838 would help to ensure the safety of pharmaceuticals for 839 patients and consumers? 840 Dr. {Woodcock.} Yes. 841 Mr. {Dingell.} Do you agree that a traceability system would improve the efficiency and effectiveness of recalls or 842 843 returns? 844 Dr. {Woodcock.} Absolutely. Mr. {Dingell.} It also must be fair, must it not? Yes 845 846 or no. 847 Dr. {Woodcock.} Yes. 848 Mr. {Dingell.} And we have to see to it that it is of 849 course workable? 850 Dr. {Woodcock.} Right. 851 Mr. {Dingell.} And not impose undue burdens on anybody if we could possibly avoid it? Yes or no. 852 Dr. {Woodcock.} Yes. 853

854 Mr. {Dingell.} Do you agree that a federal traceability system should include participation from everyone in the 855 856 supply chain? 857 Dr. {Woodcock.} Yes. Mr. {Dingell.} Do you agree that a federal traceability 858 859 system should take a phased-in approach, meaning the first 860 phase would implement lot-level tracing and the second phase 861 would implement unit-level tracing? Yes or no. 862 Dr. {Woodcock.} Yes. Mr. {Dingell.} And there are reasons for differences in 863 the different parts of the system for manufacturing and 864 865 delivering the commodities to the ultimate consumer. Is that right? 866 867 Dr. {Woodcock.} That is correct. 868 Mr. {Dingell.} And those make it necessary that we 869 should consider not only the differences but to phase in 870 because of the different levels of difficulty that Food and 871 Drug will confront, right? 872 Dr. {Woodcock.} Yes. Mr. {Dingell.} Now, do you agree that a federal 873 874 traceability system with a phased-in approach should include

clear requirements and a clear time frame for a second phase? 875 876 Yes or no. 877 Dr. {Woodcock.} Yes. Mr. {Dingell.} Do you agree that the goal of any 878 federal traceability system should be unit-level tracking? 879 880 Yes or no. 881 Dr. {Woodcock.} Yes, an ultimate goal. 882 Mr. {Dingell.} Ultimate goal but very, very difficult 883 to achieve? 884 Dr. {Woodcock.} It should be the goal. Mr. {Dingell.} Well, and it will also cause a lot of 885 886 difficulty to get everybody together on this. Dr. {Woodcock.} Absolutely, because there are tradeoffs 887 888 here. 889 Mr. {Dingell.} Do you agree that traceability 890 legislation should avoid placing undue burdens on FDA so that 891 the FDA can focus on proper and efficient implementation of 892 this particular program and all of the others which we have 893 been loading Food and Drug down with lately? Dr. {Woodcock.} Yes. 894 895 Mr. {Dingell.} And with which we have not been giving

896 you enough money? You may not want to comment on that, but 897 that is my feeling. 898 Dr. {Woodcock.} It is difficult. We try our best. 899 Mr. {Dingell.} I know you do, and it is an enormously difficult task. Do you believe that the traceability 900 901 legislation should ensure adequate systems are in place to 902 trace prescription drugs before current pedigree requirements 903 are eliminated? Yes or no. 904 Dr. {Woodcock.} Absolutely. 905 Mr. {Dingell.} Now, this traceability system and the phase related to it must also focus very carefully upon 906 907 imports. Is that right? 908 Dr. {Woodcock.} Yes. Mr. {Dingell.} Particularly imports that are components 909 910 of pharmaceuticals ala the situation which we had with 911 heparin but other examples of this, and of course, as a 912 matter of fact, also with regard to food and other things 913 that you have to contend with. Is that right? 914 Dr. {Woodcock.} Yes. Well, I think the components of drugs is different, and the supply chain issue is different 915 than the distribution chain but equally important to keep 916

substandard ingredients out. 917 918 Mr. {Dingell.} And I am not here to sell foods at this 919 particular time but we have to look at that and other things 920 too. 921 Now, Doctor, do you agree that traceability legislation 922 should provide FDA with adequate enforcement authority to 923 ensure stakeholders comply with the intent of Congress? Yes 924 or no. 925 Dr. {Woodcock.} Yes. Can I say, we don't want to be a paper tiger on this? 926 Mr. {Dingell.} I sure don't want that. It is also fair 927 928 to observe that Food and Drug has been working very carefully 929 with Members of Congress, House and Senate, Democrats and 930 Republicans, but also that you have been working with the 931 industry to try and see that we get something with which 932 everyone can work and to do so comfortably. Is that right? 933 Dr. {Woodcock.} That is correct. 934 Mr. {Dingell.} And of course, that would be the goal of 935 Food and Drug, as it would be of everybody, I think, in this 936 room. 937 Mr. Chairman, I return 19 minutes. Thank you.

Mr. {Pitts.} Seconds. Thank you. 938 939 Mr. {Dingell.} Nineteen seconds. 940 Mr. {Pitts.} The chair now recognizes the gentleman from Illinois, Mr. Shimkus, 5 minutes for questions. 941 Mr. {Shimkus.} Thank you, Mr. Chairman. 942 943 Dr. Woodcock, welcome. Glad to have you back. 944 Dr. {Woodcock.} Thank you. 945 Mr. {Shimkus.} I am going to do a kind of intro and 946 then go to my specific question on a specific item. 947 We have seen many instances in recent years of how technology can help us modernize and create efficiencies in 948 949 communications, and I am referring to stuff that we moved, 950 actually signed by the President in my other subcommittee, 951 which is a hazardous-waste issue, and we were able to through 952 legislation kind of relieve the burden of paper copies 953 throughout the supply chain all the way to the fact when the President signed the law, and we know in the old days carbon 954 955 copies, triplicate papers, they are stored throughout the 956 entire chain, that can be costly. We also have recently seen where the EPA has on their own with some prodding from us now 957 958 is able to notify water users--the water plants can notify

the users of the water on changes based upon email

959

notifications versus mailing paper copies of changes and the 960 961 like. 962 So that leads me to this whole debate that Ranking 963 Member Pallone is also very interested in, the e-labeling 964 requirements reflected. There are some reflected in this 965 discussion draft with more standardized electronic approach 966 that will increase, we believe, patient safety and provide 967 significant quality improvements and cost reductions to patients and industry. This is something that, as I 968 mentioned, that we have been following, and Ranking Member 969 970 Pallone has also been leading on this. Do you support this 971 e-labeling policy?

972 Dr. {Woodcock.} I have long supported this. We have 973 worked with the National Library of Medicine. We have 974 something called Daily Med, and Daily Med has, I think, 24-975 hour update so at the National Library of Medicine you can 976 get any drug label, the actual on-time, real-time label with 977 any safety updates within a day of FDA changing that label. 978 So that should enable easy electronic access from almost 979 anywhere.

980 Mr. {Shimkus.} So with respect to this proposed 981 legislation and what the bipartisan members are trying to 982 work out, there is obviously some language that deals with 983 this. I guess we would be concerned as to where are you at 984 as an agency in issuing guidance and moving forward on your 985 own?

Dr. {Woodcock.} My understanding is, this requires rulemaking. The fact is that we are planning to issue a rule is on our agenda, and we plan to issue a rule this year, we would hope, a proposed rule.

990 Mr. {Shimkus.} So I guess from the cosponsor of the 991 legislation and the committee and ranking member would have 992 to look and see the time, your time frame as rulemaking 993 sometimes takes a long time and a decision made of whether we 994 want to add that in legislative language, but you are really 995 supportive of the overall process and principles, it seems 996 like.

997 Dr. {Woodcock.} For drugs, all the pieces of this are 998 in place so there is a labeling repository. We do all our 999 reviews electronic at the agency at CDER and so everything is 1000 in place to enable electronic access from anywhere to the

1001 real-time drug label.

Mr. {Shimkus.} And the real-time drug labeling is the key because things can change pretty rapidly, and you can get it electronically versus something stuffed in a box that gets transmitted forward. So I appreciate your response and I appreciate you being here, and Mr. Chairman, I yield back my time.

1008 Mr. {Pitts.} The chair thanks the gentleman and now 1009 recognizes the gentleman from Texas, Mr. Green, 5 minutes for 1010 questions.

1011 Mr. {Green.} Thank you, Mr. Chairman. Track-and-trace 1012 is an important issue, and I ant to thank my colleague and 1013 neighbor, Representative Matheson, for his leadership on our 1014 side on this issue. Finding bipartisan agreement on any 1015 issue is difficult, and on more complex issues, such as 1016 supply chain for pharmaceuticals, remains even more elusive. 1017 However, I do have some concerns about the Latta-Matheson. 1018 Most importantly, the bill never really gets us to an 1019 interoperable electronic unit-level system. In fact, it 1020 prohibits FDA from moving ahead with interoperable electronic system in absence of new legislation, which we won't on until 1021

1022 10 years after the enactment. I understand the concerns that 1023 market participants have problems moving too fast toward such 1024 a system. We should be sensitive to this and make sure the 1025 law we pass is workable. But we have an opportunity to move 1026 the ball further down the field, and it my understanding that 1027 quite a bit of necessary technology already exists.

1028 Pharmaceutical companies, large and small, have stated they 1029 can work on a shorter timetable. We can do more to ensure 1030 the safety and security of our drug supply, and I think we 1031 should. But instead of moving toward requiring an enhanced system, the bill only requires the FDA to conduct one or more 1032 1033 pilot projects and conduct public hearings and report back to 1034 Congress on the result within 10 years. I am concerned that 1035 these pilot projects do not seem to be designed to test the 1036 electronic interoperable unit-level system that everyone

1037 seems to agree we need.

1038 My question is, if the goal is to get to an electronic 1039 interoperable unit-level system, which I thought was based on 1040 last fall's draft with indeed a shared goal, wouldn't it make 1041 sense for the legislation to explicitly direct the FDA to 1042 conduct the pilot program, testing out whether such a system

1043 could be established, and instead of just mentioning in vague 1044 language about better securing the supply chain. Would you 1045 like more definitive black-letter law and guidance instead of 1046 come back to us every 6 months and in 10 months from now we 1047 might get to this?

1048 Dr. {Woodcock.} As I said earlier, I think within the 1049 standards world where people are being asked to conform to a 1050 standard over time and they have to change processes, they 1051 have to make investments to do that, clarity is critical and 1052 predictability so that people know what is going to happen and they can plan for it and plan their investments, plan 1053 1054 their programs. So I think to the extent that there is a 1055 shared goal that Congress can provide clarity on where we are 1056 going as a country and where we plan to end up, that would be 1057 beneficial to all the stakeholders, even those who feel right 1058 now that this is a tremendous burden to provide clarity of a 1059 path would be extremely helpful.

1060 Mr. {Green.} And we authorize legislation and sometimes 1061 Congress doesn't reauthorize, we just kick the can down the 1062 road, and telecom is a great issue. The 1996 Telecom Act, I 1063 think it was outdated when we passed it but it is well

outdated now. So my worry is that we won't continue to 1064 1065 oversee it. 1066 My next question is my concern about, it requires the 1067 FDA to conduct a public hearing every 6 months until FDA submits a report to Congress, which could be up to 10 years 1068 1069 from enactment. Transparency is important. I agree that 1070 open and public hearings of these issues with interested 1071 stakeholders makes sense, but twice a year for 10 years seems 1072 like it is a little much. Can you talk about all that is 1073 involved in setting up a public meeting? Do you have any 1074 sense how much these meetings may cost over the 10 years 1075 twice a year for 10 years? 1076 Dr. {Woodcock.} These meetings often cost, you know, maybe up to \$20,000, depending on how they are structured, 1077 1078 but I think the opportunity cost is the cost we are really 1079 talking about here. Don't forget, we are trying to work with 1080 patient groups, and they are extremely excited about having 1081 meetings about their disease and how we can better study it, and under PDUFA that you all passed, we agreed to have 20 of 1082 1083 these meetings over the next 5 years. Now, we would like to 1084 have more. We have heard from so many patient groups that

they aren't maybe on the list and they are really concerned 1085 1086 about their disease. So it is really important. We also 1087 have pediatrics and how we develop drugs in children. We 1088 have many other pressing issues that have immediate impact on patients that we need to have various public meetings on. 1089 So 1090 there is a tremendous opportunity cost there if we are 1091 having--if we meet on a certain subject excessively. 1092 Mr. {Green.} I only have about 30 seconds left, and I 1093 would like to match our chairman emeritus in giving time 1094 back. I think the bill is a good step, but I don't think it goes far enough and it fails to give us an interoperable 1095 1096 electronic unit-level system before 10 years, and frankly, I 1097 think industry may be ready much earlier than that, and we 1098 don't want to tie our hands where we can't do it. 1099 So Mr. Chairman, I appreciate the hearing today and 1100 hopefully we will provide some more flexibility. Thank you, 1101 and I yield back my time. 1102 Mr. {Pitts.} The chair thanks the gentleman and now

1103 recognizes the gentleman from Virginia, Mr. Griffith, 5 1104 minutes for questions.

1105 Mr. {Griffith.} Thank you, Mr. Chairman.

Dr. Woodcock, I appreciate you being here today, and I have heard a number of folks say this is not an issue where there is one side or the other, and that is true. I do have some concerns.

1110 I represent a very rural district, and we have a lot of 1111 community pharmacists tucked in various nooks and crannies of 1112 my community. That being said, people are used to going to 1113 those pharmacies. They like those pharmacies. And I am just 1114 wondering as we go forward, you know, these folks have a lot 1115 of competing issues that they are facing already from other 1116 issues. As we go forward in looking at this, while we all 1117 want to make sure our supply chain is safe, can you describe 1118 what efforts the FDA has taken into account to accommodate 1119 and incorporate the small community pharmacies and make sure 1120 that they are not overly burdened by any system that we put 1121 into place?

Dr. {Woodcock.} Well, we talked to all stakeholders about this. As I said earlier, developing standards and implementing that in a stepwise way is probably the best approach to not impacting small entities excessively so they know what is coming and they can plan for it over time, and

if Congress were to establish that plan, then vendors will 1127 1128 come in and develop solutions over time and they can be 1129 adopted somewhat earlier by a larger chain, say, and would be 1130 affordable for smaller groups. 1131 So I think we need to--if Congress decides to put forth 1132 a plan, I think that would be very helpful in having everyone 1133 understand where we are going and then getting the power of 1134 commerce and entrepreneurialism and invention to develop the 1135 technologies that will make this or actually craft these 1136 technologies to this situation in a way that will make it 1137 affordable. Mr. {Griffith.} Well, I have to say that makes sense to 1138 1139 If you give people time to respond and to figure things me. 1140 out and there is enough time to come up with new ways of 1141 doing things, I do believe that vendors will come forward. 1142 Of course, the key is, as I have heard from some folks, they want to do things faster, and we have to find that sweet 1143 1144 spot, which is why we have draft language to talk about as 1145 opposed to an actual bill at this point. But I do appreciate 1146 the sponsors who brought it forward for us to at least have something to work on, and I appreciate you being here today. 1147

You also mentioned in your testimony a track-and-trace public workshop held in February of 2011. Can you just speak generally about feedback you received, and keeping in mind my community pharmacies that are a big concern? It is not that I don't care about the big chains but they are in a much better position to adapt quickly to the changes that may be coming.

1155 Dr. {Woodcock.} We understand the concerns of the 1156 community pharmacists, and there testimony today that I read 1157 that was submitted and last year also, so we understand and certainly we have talked to that community and heard at our 1158 1159 public meeting about these concerns--logistical concerns, 1160 time concerns, the fact that they feel stressed already between various demands on them. There is other competition. 1161 1162 But it is really important in these rural communities to have a pharmacy there. So we understand all that, and I guess 1163 1164 what I am saying is that putting in the goal and 1165 predictability over a time frame I think would be very 1166 helpful for everyone because they get their mind around what is going to happen in the future. 1167

1168 Mr. {Griffith.} Yes, ma'am. I appreciate that. It

1169	makes sense to me as well.
1170	Mr. Chairman, with that, unless somebody wants my time,
1171	I will yield back.
1172	Mr. {Pitts.} The chair thanks the gentleman and now
1173	recognizes the gentlelady from Virgin Islands, Dr.
1174	Christensen, for 5 minutes for questions.
1175	Dr. {Christensen.} Thank you, Mr. Chairman, and I look
1176	forward to this discussion because I have a specific issue
1177	that I wanted to discuss, and of course, the issue of
1178	altered, counterfeit, substandard or tampered-with medicines
1179	entering the drug supply is a real concern and it is a very
1180	important issue for FDA and this subcommittee to address, but
1181	I want to raise a consequence that may or may not be intended
1182	but it is not warranted, and I hope that the proposed
1183	legislation can help or that there is something that FDA can
1184	do about it.
1185	In the efforts to keep substandard drugs out of the U.S.
1186	marketplace, re-importation from a foreign jurisdiction is
1187	prohibited. The U.S. Virgin Islands, as the name indicates,
1188	is a part of the United States. Our pharmacists are U.S.
1189	trained. They have U.S. licenses. Our pharmacies are

regulated by U.S. law, and our pharmacies including our 1190 1191 hospitals only order medication from U.S. distributors. As a 1192 provision of the treaty that was signed when the United 1193 States bought the Virgin Islands, we are outside of the U.S. 1194 custom zone so for shipping only we are international. 1195 Again, we are totally domestic except for shipping, and 1196 because of that, our pharmacies have been unable to ship back 1197 their medication that might have been oversupplied, spoiled, 1198 expired. They are unable to ship it back to their supplier, 1199 and it incurs costs and those costs are passed on to the 1200 patients. So we have met on this in the past in the past 1201 Administration. I have legislation to try to address it. But 1202 we are willing to work on anything that can be worked on and 1203 maybe, you know, we want to work with our colleagues on the 1204 committee but maybe there is something that FDA would be able 1205 to do.

So if this national track-and-trace system in place, would that be a way to help us fix that, do you think? Dr. {Woodcock.} Probably, but I can't opine on the legal aspects because it would require analysis. You raised this issue with me last year, and we agreed that your staff

would talk to our folks, and I had thought this had been 1211 1212 resolved or improved. So I would also urge you to talk to 1213 FDA staff again and raise this issue. We can follow up with 1214 you. But I do believe obviously things can be put into 1215 legislation that would remedy a situation like this as well. 1216 Dr. {Christensen.} But you would not oppose it, would 1217 it, if we were--1218 Dr. {Woodcock.} No, I think--1219 Dr. {Christensen.} --only shipping back to the 1220 distributor? Dr. {Woodcock.} Well, a track-and-trace system would 1221 1222 actually enable this because we would know what the drugs 1223 were. Dr. {Christensen.} And I thought it was resolved also. 1224 1225 They were shipping by FedEx and it wasn't being checked but 1226 now it is back to square one. So thank you very much, and I 1227 don't have any further questions, Mr. Chairman. 1228 Mr. {Pitts.} The chair thanks the gentlelady and now 1229 recognizes the gentlelady from North Carolina, Ms. Ellmers, 5 1230 minutes for questions. Mrs. {Ellmers.} Thank you, Mr. Chairman, and thank you, 1231

1232 Dr. Woodcock, for being here today.

1233 I have a couple of questions on the basically moving 1234 towards the electronic access for, you know, data for 1235 patients, which now of course are the package inserts that 1236 accompany medication. You know, I do believe that the real-1237 time access is very, very important but I am concerned about 1238 our seniors and their ability to have that information right 1239 there for them. You know, I have heard from many seniors 1240 who--you know, as a nurse, I know how important it is for 1241 them to have that information. So what exactly is the push there? I mean, I understand the technology, the ability to 1242 1243 access it online is very important, but there again, many of 1244 our seniors are not Internet savvy, and I am concerned that maybe we are moving a little guickly with this. So what are 1245 1246 your thoughts on that?

1247 Dr. {Woodcock.} Well, what we are talking about is 1248 package inserts and, you know, many physicians have trouble 1249 with the package insert.

1250 Mrs. {Ellmers.} Well, it is a lot of information.

1251 Dr. {Woodcock.} Yes, so we are also working an1252 initiative we call Patient Medication Information, all right,

1253	and we have been working on that for some time, and we are
1254	about the only country in the world that doesn't give
1255	patients a leaflet about their drug in patient language. So
1256	we are moving to do that, and it would be a combination of
1257	electronic and paper, depending on what the individual
1258	desired.
1259	Mrs. {Ellmers.} Okay.
1260	Dr. {Woodcock.} Yes. And it would be one page probably
1261	with access to more if people wanted more information or
1262	instructions on how to get more information.
1263	Mrs. {Ellmers.} So that wouldn't automatically come
1264	with the medication is what you are saying?
1265	Dr. {Woodcock.} It would.
1266	Mrs. {Ellmers.} It would automatically come?
1267	Dr. {Woodcock.} Yes.
1268	Mrs. {Ellmers.} Because I am thinking a combination
1269	approach is definitely the way
1270	Dr. {Woodcock.} For consumers.
1271	Mrs. {Ellmers.}that we should go, and, you know,
1272	certainly, again, the package inserts do come with more than
1273	enough information obviously for different reasons. So you

do favor more of a combination approach? 1274 1275 Dr. {Woodcock.} For the patient. 1276 Mrs. {Ellmers.} For the patient? 1277 Dr. {Woodcock.} That is right. We feel that people who prescribe drugs or dispense them, all of them are going to 1278 1279 have electronic access. 1280 Mrs. {Ellmers.} Right, and availability. So the 1281 electronic access is more for the physicians? 1282 Dr. {Woodcock.} Technical. Mrs. {Ellmers.} Okay. Thank you for clarifying that 1283 for me because that was definitely an area I was very 1284 1285 concerned about. 1286 Now, I do want to talk a little bit about--oh, I only have a few moments. But the track-and-trace as far as, how 1287 1288 do you basically figure out which things would be tracked and 1289 traced based on drugs and based on other things like saline or additives, you know, things that mix drugs? I mean, will 1290 1291 that also be included in track-and-trace? 1292 Dr. {Woodcock.} They are drugs, so obviously whatever is included is up to Congress, but we would feel that 1293 anything that goes into a drug should be. So we regulate 1294

1295	saline bags and so forth as pharmaceuticals now. They have
1296	their own code, they have lot numbers and so forth, and often
1297	we have to recall those.
1298	Mrs. {Ellmers.} Okay. So you are looking at anything
1299	that is considered a drug?
1300	Dr. {Woodcock.} Yes.
1301	Mrs. {Ellmers.} Thank you very much.
1302	Mr. {Pitts.} The Chair thanks the gentlelady and now
1303	recognizes the ranking member of the full committee, Mr.
1304	Waxman, for 5 minutes for questions.
1305	Mr. {Waxman.} Thank you, Mr. Chairman.
1306	Dr. Woodcock, as you know, California has a law that
1307	once completely implemented will require that all transfers
1308	of ownership of prescription drugs from the manufacturer
1309	through to the final pharmacy dispenser be accompanied by a
1310	so-called pedigree that maintains a record of each successive
1311	transfer and tracks information about the drug product at the
1312	unit or package level. Under the law, these pedigrees must
1313	be transferred electronically and the entire system will have
1314	to be interoperable so that all the information on any
1315	prescription drug will be readable and updatable by all

members of the drug distribution chain. This law is guite 1316 1317 comprehensive and ambitious and has been the subject of 1318 criticism by some industry members as being too ambitious, 1319 either in its scope or its time frame for implementation. 1320 But I was glad to hear on your answers to Mr. Pallone's 1321 questions that you agree that an electronic interoperable 1322 unit-level system should be the goal here. I agree that we 1323 need to allow enough time for the technology to evolve and 1324 for the system to be put in place. We don't want to set 1325 unrealistic expectations. But I think California had it right when they insisted upon this kind of system, and I 1326 1327 think this system is ultimately the right one for the 1328 country.

As Mr. Pallone mentioned, the Latta-Matheson draft 1329 1330 doesn't even set this up as a goal even at some distant point 1331 in the future creating an electronic interoperable unit 1332 system. In fact, they prohibit FDA from moving forward with 1333 this kind of system ever. I think that is the wrong policy. 1334 The Latta-Matheson bill also doesn't require any kind of 1335 tracing of drugs until 5 years after enactment at the 1336 earliest. But perhaps even more concerning to me is that on

day one, as soon as this bill would be passed, it would 1337 1338 preempt State law even though they never created an effective 1339 alternative at the federal level. On day one, all State laws 1340 on the subject are wiped out, and to be clear, this is not 1341 just California's law. According to the Health Care 1342 Distribution Management Association, at least 11 States have 1343 laws requiring distributor licensing and pedigree 1344 requirements. Some States like Florida have a requirement 1345 that a pedigree be passed with most drug transactions, and 1346 you mentioned this in your testimony, but last year Representative Cummings and Senator Rockefeller issued a 1347 1348 report detailing their investigations of the gray market in 1349 drug trade in the United States and some of the dangers it poses, and they discussed the importance of pedigrees for law 1350 1351 enforcement in these cases. But the very law requiring these 1352 pedigrees would be erased under the House's bill on day one. 1353 Again, you mentioned this in your testimony but I would 1354 like to hear more. Can you tell us whether you think 1355 preempting these State laws on day one makes sense when we 1356 never get to the system you say we need? Please explain in more detail what would be the consequence of wiping out 1357

currently existing pedigree requirements? I am deeply 1358 1359 concerned about preempting not only California's law but the 1360 other States that clearly provide a benefit today, and I 1361 agree that if we can't get to a strong federal system, it might make sense to preempt State laws but the Latta-Matheson 1362 1363 draft certainly does not create a system worthy of broad 1364 preemption on day one. Would you elaborate on this? 1365 Dr. {Woodcock.} I think it is really important that 1366 whatever is enacted does not lower the safety of the drug 1367 supply, doesn't decrease or put bigger holes in the safety net. That is really important. So the pedigree requirements 1368 1369 now, as I said--1370 Mr. {Waxman.} Just for clarification, safety net--Dr. {Woodcock.} Of tracking. 1371 1372 Mr. {Waxman.} We are not talking about poor people. 1373 That is usually what --1374 Dr. {Woodcock.} Oh, I see. Okay. Maybe I used the 1375 wrong term. But the safety around drugs, of the drug supply, 1376 okay? Eliminating the paper pedigree until we have something 1377 else in place would be creating greater loopholes for insertion of counterfeit drugs and substandard drugs into the 1378

distribution chain because we wouldn't be able to track them 1379 1380 backwards, all right? And putting a law in place that 1381 eliminated States' ability to require that tracking without 1382 providing something comparable in its place would be lowering 1383 the safety of the drug supply for whatever time it took. 1384 Mr. {Waxman.} I agree. Let me ask you one other 1385 question in the few seconds I have. California law also 1386 ensures that all entities in the supply chain participate in 1387 the e-pedigree system. One of the major issues we have 1388 confronted in the context of this debate is whether pharmacies should be required to be part of the system. 1389 Do 1390 you think it makes sense to exempt pharmacies from a 1391 nationwide track-and-trace system? Dr. {Woodcock.} I think ultimately if we want to know 1392 1393 what drug the patient got, okay, and several times in the 1394 last several years that has been imperative for us to figure 1395 out what drug each patient got because sometimes we hear 1396 about the problem from the patient dying--1397 Mr. {Waxman.} So you think the pharmacies should be included so we know what the patient got? 1398

1399 Dr. {Woodcock.} Eventually, you know, that is the only

way to know what the patient got, and so we end up doing 1400 1401 these elaborate investigations to figure out which drug the 1402 patient got, and yet often, as I said, we can't pull the 1403 drugs out of the patient's hands because they may be 1404 lifesaving medicines. So we may in the next several years 1405 get into a tragic situation because of that. So I think the 1406 ultimate goal really ought to be our ability to track down to 1407 that level. 1408 Mr. {Waxman.} Thank you. Thank you, Mr. Chairman. 1409 Mr. {Pitts.} The chair thanks the gentleman and now recognizes the gentleman from Pennsylvania, Dr. Murphy, 5 1410 1411 minutes for questions. 1412 Mr. {Murphy.} Dr. Woodcock, great to have you back 1413 here. I always appreciate your candid testimony. 1414 This may have been asked before, and I apologize if I am 1415 asking it again, but I would like to know. So how are things 1416 done now? How are you made aware that if there is a problem 1417 with something that may be counterfeit, toxic, contaminated, 1418 what is the process now by which we find out? 1419 Dr. {Woodcock.} Well, there are a whole variety. We may be alerted from the health care system. They may find it 1420

and they look at it and they see something is wrong. We may 1421 1422 be alerted by whistleblowers who see, you know, this drug's label is in Turkish, this can't be right, okay? We may--and 1423 1424 the ones that we are very concerned about is where we get 1425 harm, patient harm, and so we get adverse-event reports, 1426 people are dying and we don't know why, and then we have to 1427 go out and do a huge investigation of what did they get and 1428 so forth.

1429 Mr. {Murphy.} So right now it is towards the end of the 1430 supply chain that you may find something by an adverse event 1431 or someone--

Dr. {Woodcock.} Yes, and we feel with the law that was passed last year, now manufacturers have to tell us if they get a component that is falsified or substandard, they need to tell us that now, but out in the world, usually it is sort of voluntary. Pharmacists will call us, a nurse or whatever, and we will find out about it that way.

1438 Mr. {Murphy.} And this may be at the end of things. 1439 What about in terms of the ingredients that go into these? 1440 Do you pick up anything on that too, or is that the 1441 manufacturers on their site testing the quality of their

1442 ingredients?

Dr. {Woodcock.} We ask them to test, and as I said, the Innovation and Safety Act included additional provisions on the supply side, the incoming side to make a drug, to strengthen that, making them strengthen their controls on the supply chain and the testing and so forth when they receive the components.

1449 Mr. {Murphy.} So now if the FDA has a particular 1450 concern about a drug that would cause an immediate threat to 1451 individuals, what would the agency do?

Dr. {Woodcock.} We talk to the company and ask them to 1452 1453 do a recall or they may have instituted a recall themselves. 1454 We determine--we do a risk assessment, which we call Health 1455 Hazard Evaluation, and we determine the level of possible 1456 harm, and if it is a class I recall, then we have to decide 1457 should it go down to the patient level and be pulled out of 1458 the hands of the patients and then we do-- the company is 1459 supposed to be in charge of that but we audit that, the 1460 effectiveness, to make sure it is happening, and if it is a really bad problem, we may collaborate with the CDC or the 1461 public health departments in the States, you know, to make 1462

1463 sure this all happens.

1464 Mr. {Murphy.} Okay. Let me ask something. A witness 1465 on our second panel, Walter Berghahn, notes in his testimony there has been ``a tremendous amount of effort expended in 1466 the last 10 years to tighten up and secure the supply chain. 1467 1468 Those efforts certainly have closed many of the cracks and 1469 yet counterfeits still appear, and the FDA has opened more 1470 investigations in the last few years than ever before, more 1471 than 70 instances in 2010 alone.'' What do you attribute to 1472 these increased investigations? Is it that the FDA is getting better at it or the problem is getting worse? 1473 1474 Dr. {Woodcock.} Always hard to know, right? I think 1475 the problem is getting worse. We know from our colleagues 1476 around the world that in some parts of the world, 50 percent 1477 of the drug supply is counterfeit, but those folks in that 1478 part of the world don't pay a lot for their drugs, so our 1479 market is ideal because the drugs are expensive and you get a lot of money for them. And so we see more professional 1480 1481 criminals getting involved, you know, racketeering, very 1482 high-level criminal elements, you know, conspiring to do this and penetrate the U.S. drug supply because there is a lot of 1483

1484 money to be made.

Mr. {Murphy.} We hear a lot about people who offer drugs online. Your recommendations on whether or not people should purchase anything when they go to a website and they say, oh, here is my prescription, I will just get it from there, your recommendation is should they or should they not purchase from those?

Dr. {Woodcock.} There is a program called VIPPS, which offers certified online pharmacies. Certainly some of the pharmacies are fine. Many of them, you know, we have looked, we have ordered, we have done this. You can get counterfeit drugs very easily or substandard drugs ordering from an online pharmacy that you don't know anything about.

Mr. {Murphy.} So make sure you know who that online pharmacy is. Finally, let me ask you this, and this relates to what I was just asking about too. Could this legislation eventually lead to less drug shortages or more because you are watching more closely? What do you think the outcome will be?

1503 Dr. {Woodcock.} I don't think it will have a huge 1504 impact on drug shortages, frankly. I think that problem, as

1505	we discussed earlier, has other root causes other than
1506	obviously the existence of shortages is another temptation
1507	for people to introduce counterfeit because people are
1508	desperate to get these medicines and they will pay a lot for
1509	them. But I don't that is the root cause of shortages.
1510	Mr. {Murphy.} Thank you very much. Yield back, Mr.
1511	Chairman.
1512	Mr. {Pitts.} The chair thanks the gentleman and now
1513	recognizes the gentlelady from Florida, Ms. Castor, for 5
1514	minutes for questions.
1515	Ms. {Castor.} Thank you, Mr. Chairman, and I want to
1516	thank my colleague, Congressman Matheson, for bringing the
1517	discussion draft to us, and welcome.
1518	Dr. {Woodcock.} Thank you.
1519	Ms. {Castor.} Dr. Woodcock, a critical part of an
1520	effective drug supply chain is the ability to secure a stable
1521	supply of medically necessary drugs, and I know this isn't a
1522	hearing on drug shortages but there is a very serious issue
1523	and I feel compelled to ask you about it, and that is the
1524	critical shortages involved with babies in the NICUs right
1525	now, the neonatal intensive care units in children's

hospitals in NICUs all across the country. We are talking 1526 1527 about the calcium, zinc trace elements, magnesium. I have 1528 been advised by some children's hospitals that they have less 1529 than 2 weeks of nutrients left, and this is already impacting 1530 their ability to provide the top standard of care for the 1531 most vulnerable of patients. I do understand that you have 1532 been very aggressive in tackling this problem along with your 1533 drug shortage professional staff, the children's hospitals 1534 and the manufacturers, but it is so serious now that a 1535 medical director at one children's hospital is calling is the worst crisis he has ever seen in 30 years. What is happening 1536 1537 on this now and what is the outlook here over the coming 1538 months?

Dr. {Woodcock.} Well, we have worked with one 1539 1540 manufacturer to allow them to ship product along with filters 1541 to filter out the product that is precipitating, because you 1542 can't give particles in IV fluids. It can embolize into the 1543 lungs. So that should provide some of the products. We are 1544 also working with manufacturers outside the United States to 1545 make sure their product is okay and bring it into the country. We recognize this is a critical issue and it is 1546

1547	reaching a critical stage, and we need to get product out
1548	there for these babies. We understand that.
1549	Ms. {Castor.} So what is your time frame? Because they
1550	are saying they only have the product for the remaining 2
1551	weeks, and what is happening is there are professionals are
1552	calling all over the country trying to find the elements that
1553	they need. Are they going to be able to see some relief here
1554	over the next week or two?
1555	Dr. {Woodcock.} We hope so. As I said, some of these
1556	products are being shipped now with filters, all right, then
1557	others we negotiating on importing some of those other
1558	elements into the country, and once we can give the green
1559	light that we are assured of the safety, then they can be
1560	made available pretty rapidly.
1561	Ms. {Castor.} Okay. That is the short-term solution.
1562	What is the longer-term answer?
1563	Dr. {Woodcock.} The long-term solution appears to be
1564	some structural problems, as we talked about earlier, in how
1565	these drugs are manufactured and delivered to patients and
1566	the lack of a robust supply. So if one manufacturer goes
1567	down in the United States, they may be the sole source of

1568	some of these life-maintaining products, and that is a really
1569	bad situation. It is sort of outside of the scope of FDA,
1570	though, to figure out how to have more manufacturers.
1571	Ms. {Castor.} And drug shortages in general, have you
1572	noticed a ramp-up in counterfeits that try to fill that void
1573	in the market over the past few years?
1574	Dr. {Woodcock.} In some cases people, unscrupulous
1575	people, exploit the existence of a shortage to try to
1576	introduce substandard products.
1577	Ms. {Castor.} Which particular areas have you seen
1578	that?
1579	Dr. {Woodcock.} We would have to get back to you on
1580	that as far as all the details.
1581	Ms. {Castor.} Okay. Thank you very much. I yield
1582	back.
1583	Mr. {Pitts.} The chair thanks the gentlelady and now
1584	recognizes the gentleman from Utah, Mr. Matheson, 5 minutes
1585	for questions.
1586	Mr. {Matheson.} Well, thank you, Mr. Chairman. You
1587	know, this is an issue that a lot of us have been working on
1588	for a number of years, and I want to acknowledge some of the

colleagues, Congressman Boulier and Congressman Bilbray, who 1589 1590 both worked on this issue, and then I am pleased to be 1591 working with Mr. Latta. And I think this year we have an 1592 opportunity to really get something done, and I think we 1593 should all embrace that opportunity to try to work together. We put out a discussion draft. This is not a bill. It is an 1594 1595 opportunity for us to really start to dig into this issue and 1596 have a substantive discussion, and I hope that is what we do, 1597 and this hearing is the first good step in that process.

1598 And I really want to thank Dr. Woodcock, who has spent a lot of time on this issue, has been very open, has talked to 1599 1600 me on the phone about this issue before and been engaged for 1601 a long time on it, and I know you have a strong desire to 1602 come up with a national standard that sets the rules for 1603 everybody. I think there is a need for preemption. I heard 1604 some questions earlier concerned about timing of preemption 1605 but I think we all know we need one set of rules in this 1606 country and not 50 different State rules, and I think you 1607 would acknowledge that, but I do appreciate all you have 1608 done. You put your own time in and your staff in offering 1609 resources on this.

1610 In your testimony, you describe several situations or 1611 instances of counterfeit drugs finding their way into the 1612 supply chain. Many have been reported in the press reports. 1613 Can you describe for us how the product was able to really 1614 get in the supply chain, and you can talk about the emerging 1615 level of sophistication that the bad actors are deploying 1616 right now to do this?

1617 Mr. {Woodcock.} Yes. We see a range of sophistication, 1618 and of course, the ones we are most worried about are those 1619 who are actually able to copy, really make a counterfeit. It looks like the authentic product. It has the label of the 1620 1621 authentic product and yet it isn't. It may often have 1622 nothing in there, or we have had that had regular water, which is very dangerous to just give to people, say, 1623 1624 intravenously. So they are introduced at some point in the 1625 distribution chain. It may be a secondary distributor level. 1626 It may be the pharmacy level. It may be somewhere in between 1627 there. It may be where something is shipped to a clinic and 1628 they buy from a distributor who actually probably due to perhaps the amount of oversight that we should have of some 1629 these licensed distributors, they are sort of the launderers. 1630

1631	They launder these products and then put them into a
1632	legitimate chain, send them out to, say, cancer clinics and
1633	then people use those drugs that are not effective.
1634	Mr. {Matheson.} And it is safe to say with over a $$300$
1635	billion annual prescription drug market in the United States,
1636	this is pretty attractive.
1637	Dr. {Woodcock.} That is right.
1638	Mr. {Matheson.} The reason I ask this, I know this
1639	sounds obvious to everybody but this is why we are doing
1640	this. I mean, our current system is not necessarily
1641	structured where it can best mitigate this challenge of
1642	counterfeiters, and I think there are a lot of important
1643	issues, a lot of important details in this discussion draft,
1644	but I think it is important we all acknowledge why we need a
1645	national standard, why we have to do something better than we
1646	have now because the bad guys are getting smarter, more
1647	aggressive and there is just too much money on the table for
1648	them not to want to do some bad things.
1649	One other question, and then I will let you go. You
1650	touched on this a little perhaps in other questions but can

1651 you walk us through how moving forward with a robust track-

and-trace system would complement the work that this 1652 1653 committee undertook last year in the latest version of PDUFA, 1654 how that is going to complement what that bill already gave 1655 you some authority to do? 1656 Dr. {Woodcock.} Absolutely. There are two sides to the whole chain of medicines. One is the supply chain where you 1657 1658 get all the components, maybe the IV bags, the active 1659 pharmaceutical ingredient and all other components. They go 1660 into the manufacturer. That is one area where the Innovation 1661 and Safety Act really addressed that supply chain and tightened up some big loopholes that existed. Now this is a 1662 1663 distribution chain, okay, the manufacturer makes the product, but then as I described, they send it out all over through a 1664 chain of distributors and so forth down to the pharmacy or 1665 1666 clinic or hospital level, and that is the chain where there 1667 are big loopholes still where these fake products can be 1668 inserted or we just don't know where the products are going, 1669 and so once we have an approach and a goal laid out for this 1670 distribution chain side, then we will have a very intact system that we can have much more confidence in. 1671 Mr. {Matheson.} Thanks. Mr. Chairman, I yield back. 1672

Mr. {Pitts.} The chair thanks the gentleman. That 1673 1674 concludes the questions from the members. I am sure they 1675 will have some follow-up questions, some other questions. We will send those and ask that you please promptly. 1676 Dr. {Woodcock.} We will be delighted to work with you. 1677 1678 Mr. {Pitts.} Thank you very much, Dr. Woodcock, for 1679 your testimony. 1680 That concludes the first panel. We will ask the staff 1681 to set up for the second panel. We have seven witnesses. We 1682 will take a 2-minute break while they set up. 1683 [Recess.] Mr. {Pitts.} The subcommittee will reconvene. On our 1684 1685 second panel today, we have seven witnesses, and I will 1686 introduce them in order of their presentations. First, Ms. 1687 Elizabeth Gallenagh, Vice President of Government Affairs and 1688 General Counsel, Healthcare Distribution management Association. Then Christine Simmon, Senior Vice President of 1689 1690 Policy and strategic Alliances, Generic Pharmaceutical 1691 Then Mr. Michael Rose, Vice President of Supply Association. 1692 Chain Management, Johnson and Johnson Health Care Systems. Then Dr. Tim Davis, owner, Beaver Health Mart Pharmacy on 1693

1694	behalf of the National Community Pharmacists Association.
1695	Then Mr. Allan Coukell, Director of the Medical Programs of
1696	the Pew Charitable Trust. Then Dr. Carman Catizone,
1697	Executive Director, National Association of Boards of
1698	Pharmacy. And finally, Mr. Walter Berghahn, President of
1699	Smarter Meds for Life and Executive Director of the
1700	Healthcare Compliance Packaging Council.
1701	Thank you all for coming. You will each be given 5
1702	minutes to summarize your testimony. Your written testimony
1703	will be placed in the record.
1704	Ms. Gallenagh, we will start with you. You are
1705	recognized for 5 minutes.

1706 ^STATEMENTS OF ELIZABETH GALLENAGH, J.D., VICE PRESIDENT OF 1707 GOVERNMENT AFFAIRS AND GENERAL COUNSEL, HEALTHCARE 1708 DISTRIBUTION MANAGEMENT ASSOCIATION; CHRISTINE M. SIMMON, 1709 SENIOR VICE PRESIDENT, POLICY AND STRATEGIC ALLIANCES, 1710 GENERIC PHARMACEUTICAL ASSOCIATION; MICHAEL ROSE, VICE 1711 PRESIDENT, SUPPLY CHAIN VISIBILITY, JOHNSON AND JOHNSON 1712 HEALTH CARE SYSTEMS, INC.; TIM DAVIS, R.PH., BEAVER HEALTH 1713 MART PHARMACY, ON BEHALF OF NATIONAL COMMUNITY PHARMACISTS; 1714 ALLAN COUKELL, DEPUTY DIRECTOR, MEDICAL PROGRAMS, THE PEW 1715 CHARITABLE TRUSTS; CARMEN A. CATIZONE, R.PH., D.PH; AND WALTER BERGHAHN, EXECUTIVE DIRECTOR, HEALTH CARE COMPLIANCE 1716 1717 PACKAGING COUNCIL

1718 ^STATEMENT OF ELIZABETH GALLENAGH

1719 } Ms. {Gallenagh.} Good morning, Chairman Pitts, Ranking 1720 Member Pallone and members of the subcommittee. I am Liz 1721 Gallenagh, Vice President, Government Affairs, and General 1722 Counsel at HDMA. Thank you for this opportunity to inform 1723 you about the critically important issue of prescription drug

pedigree, traceability and supply chain safety. I would also 1724 1725 like to thank Chairman Upton, Congressman Latta and 1726 Congressman Matheson for their leadership in this area as 1727 well as the hard work and dedication of their staff. 1728 The pharmaceutical distribution industry's primary 1729 mission is to operate the safest, most secure and efficient 1730 supply chain in the world. As part of this mission, HDMA's 1731 members work to eliminate counterfeit and diverted medicines 1732 by capitalizing on the technological innovation and constant 1733 improvements in efficiency that are the foundation of our 1734 industry. Today, on behalf of our 33 members, I am here to express 1735 1736 HDMA's strong support for a national, uniform approach to 1737 pedigree and the traceability of medicines throughout the 1738 supply chain. I will speak with more detail later in my 1739 testimony, but I want to state that we support the core elements of the Latta-Matheson proposal and look forward to 1740 1741 working with you and your Senate colleagues on the final 1742 bill.

1743 HDMA believes that any reform and modernization of the 1744 supply chain should raise national wholesaler standards and

include a new federal ceiling for pedigree and traceability 1745 1746 requirements to improve safety and uniform and establish the 1747 foundation for longer-term electronic solutions such as unit-1748 level serialization and product tracing. In addition to fundamentally addressing counterfeit and diverted medicines, 1749 1750 a national approach may be a useful tool in discouraging gray 1751 market activities associated with drug products in short 1752 supply. More importantly, it will put the United States on 1753 par with other countries around the world that are currently 1754 beginning to engage in serialization and traceability 1755 efforts.

After many years of debate, it appears that we finally 1756 1757 may have an opportunity to enact federal legislation in this 1758 area. This is in large part due to a broad consensus among 1759 supply chain partners as well as growing support from Members 1760 of Congress. While Congress, FDA and industry have been 1761 working at this diligently for several years, it is critical 1762 that Congress act now due to the uncertainties faced by the 1763 industry, the need for uniformity across the supply chain and 1764 to ensure patient safety.

1765 Basic guidelines for pedigree were set forth 25 years

ago with the enactment of the federal PDMA. Since that time, 1766 1767 activity at the State level has varied with some enacting 1768 very complex laws and others never going further than the 1769 original guidelines. Based on our experience, the complexities of dealing with multiple approaches in the 1770 1771 States will only get worse if we fail to solve this problem 1772 now at the national level. 1773 Since Florida's first foray into raising pedigree and 1774 licensure standards in 2003, we have seen dramatic variations 1775 across the country. This variation has occurred despite HDMA's attempts to work in every State along with fellow 1776 1777 stakeholders to achieve more uniformity. Today, for example, 1778 29 States have acted beyond the federal PDMA standards. The 1779 States of Florida and California are viewed as leaders in 1780 this area. However, they take completely different 1781 approaches, California being the most complex and forward-1782 looking with track-and-trace and electronic pedigree 1783 implementation beginning in 2015, and Florida being the most 1784 stringent today in terms of what is happening in the supply 1785 chain with pedigree requirements. 1786 This patchwork not only creates operational challenges

but also leaves openings for bad actors shopping for more 1787 1788 lenient State rules, openings that could mean the difference 1789 between a fake or diverted medicine being dispensed to an 1790 innocent patient in need of important treatment. Because of 1791 this State-by-State variation, we believe pedigree and 1792 traceability should be under the purview of Congress and the 1793 FDA. 1794 We have been a leader in this field and we are dedicated 1795 to working with supply chain partners and stakeholders on a 1796 consensus approach to pharmaceutical traceability. We are an active member also of PDSA, the Pharmaceutical Distribution 1797 1798 Security Alliance. 1799 The bipartisan discussion draft released by the committee this week achieves these goals and captures the 1800 1801 core consensus elements that will significantly improve the 1802 integrity and safety of the supply chain. Specifically, the 1803 proposal does include national requirements for wholesaler 1804 licensing while preserving a critically important role for 1805 the States; uniform direct purchase and standard pedigree 1806 options; eliminating the current 50-State patchwork, 1807 manufacturer serialization at the unit level and case level,

1808	enabling unique identification of prescription drug products
1809	for the first time in the United States; the development of
1810	electronic systems and processes to facilitate traceability
1811	and transaction data exchange to provide additional
1812	efficiency and safety benefits within the supply chain, and
1813	appropriate transition times and development phases for the
1814	migration to traceability for each segment.
1815	There is no single element that will protect the supply
1816	chain from every threat but rather a comprehensive solution
1817	should incorporate each of these elements. We applaud your
1818	work and urge the committee to advance this important issue
1819	this year. Now is the time for Congress to act to bring
1820	cohesion and consistency to our national drug supply chain.
1821	[The prepared statement of Ms. Gallenagh follows:]

1823 Mr. {Pitts.} The chair thanks the gentlelady and now 1824 recognizes Ms. Simmon for 5 minutes for an opening statement.

1825	^STATEMENT OF CHRISTINE M. SIMMON
1826	} Ms. {Simmon.} Thank you. Good morning, Chairman Pitts,
1827	Ranking Member Pallone and members of the subcommittee.
1828	Thank you for inviting me to testify here today on the
1829	important topic of securing our Nation's pharmaceutical
1830	supply chain. I am Christine Simmon, Senior Vice President
1831	of Policy at the Generic Pharmaceutical Association. We
1832	represent the finished-dose generic drug manufacturers and
1833	bulk pharmaceuticals and suppliers to the industry.
1834	For the past year, the effort to develop a national
1835	solution to securing the supply chain received strong support
1836	from key members in both the House and Senate but
1837	unfortunately was not enacted into law. We applaud this
1838	committee for taking up this issue today, and we recognize
1839	and appreciate the dedicated attention to this issue and
1840	leadership by Congressmen Latta and Matheson.
1841	GPhA believes that every patient in America deserves a
1842	safe, secure prescription drug supply. For many years, GPhA
1843	has worked closely with multiple stakeholders across the

supply chain to ensure just that. As the makers of 80 1844 1845 percent of scripts dispensed in the United States, our 1846 industry is deeply committed to preventing and detecting the distribution and sale of counterfeit and adulterated 1847 1848 medicines. We strongly supported last Congress's historic 1849 Generic Drug User Fee Act, which recognizes that while 1850 providing earlier access to medicines is critical, FDA's 1851 central mission is ensuring drug safety. We applaud the 1852 efforts of this committee in enacting the user fee program 1853 into law.

GPhA is a member of the Pharmaceutical Distribution 1854 1855 Security Alliance along with many others in the supply chain 1856 and including others at this table. The group's primary goal 1857 is to ensure patients have uninterrupted access to safe, 1858 authentic FDA-approved medicine. So today I am going to 1859 share with you our support for a system build on three core principles: a uniform federal standard, technical 1860 1861 requirements that support achievability, and a building block 1862 approach to ensuring orderly implementation and avoid 1863 unintended consequences.

1864 It is vital to ensure that any supply chain security

system put in place is practical, focused and uniform across 1865 1866 the country. California's drug pedigree model that will be 1867 effective in 2015 would require implementation of full 1868 electronic track-and-trace capabilities where the entire distribution history and location of every unit in the supply 1869 1870 chain can be determined at any time. At present, the 1871 technology to support such a system is unproven and the costs 1872 associated would be billions. Any attempt to hastily 1873 implement such a system could lead to confusion in the supply 1874 chain, aggravate product shortages and dramatically increase costs for all prescriptions including generic medicines. 1875 1876 In contrast, GPhA believes that a building block enables 1877 the industry to attain interoperability in achievable steps 1878 all the while applying the knowledge and experience gained 1879 over time to refine the model. While the generic industry is 1880 still reviewing recently released drafts, many elements are 1881 consistent with our proposed approach.

1882 Specifically, as outlined in phase I of the Latta-1883 Matheson discussion draft, generic manufacturers have 1884 committed to identifying individual saleable units of 1885 medicine with labels and maintaining and managing data in

their systems that would associate the identifiers on 1886 1887 individual bottles of medicine with the lot numbers of the 1888 products. Verification that a specific unit was serialized 1889 by a manufacturer within a given production lot can provide 1890 information and security that is a major step forward from 1891 current practices. The system would help identify and 1892 prevent the introduction of suspect product through full lot 1893 traceability and allow regulatory authorities to validate the 1894 unique identifier of a product at the unit level.

1895 The stepped approach in the House draft would provide 1896 immediate measures to increase supply chain security. The 1897 system established under the proposals will improve the 1898 efficiency and effectiveness of drug recalls and returns. In 1899 planning for the future, it would provide critical building 1900 blocks that can be expanded as public health threat standards 1901 and technologies evolve.

Because American consumers today expect the convenience and simplicity inherent in the digital transfer of information, GPhA strongly supports the e-labeling requirement in the discussion draft to provide more standardized electronic prescription drug information that

would increase patient safety and provide significant quality 1907 1908 improvements and cost reductions through a more accurate, 1909 cost-effective and sustainable alternative to paper inserts. 1910 In conclusion, Mr. Chairman, GPhA and the industry share 1911 the concerns of the committee with regard to maintaining the 1912 security of our country's drug supply. The development of a 1913 uniform national system is needed to give regulatory 1914 authorities another tool for enforcement, make it more 1915 difficult for criminals to breach the supply chain, and 1916 enhance the ability of the supply chain to respond quickly 1917 when a breach has occurred. We believe the model proposed by 1918 the House includes many elements to achieve these goals. We 1919 look forward to working together with Congress to develop a 1920 consensus measure on this important issue that can be enacted 1921 into law.

1922 Thank you, and I would be happy to answer any questions 1923 you may have.

1924 [The prepared statement of Ms. Simmon follows:]

1926 Mr. {Pitts.} The chair thanks the gentlelady and now 1927 the chair recognizes Mr. Rose for 5 minutes for an opening 1928 statement. Please speak into the microphone.

1929 **^**STATEMENT OF MICHAEL ROSE 1930 Mr. {Rose.} Thank you for your introduction, Mr. } 1931 Chairman, and thank you, Mr. Pallone. I work for and am 1932 representing Johnson and Johnson Health Care Systems Inc. 1933 Johnson and Johnson Health Care Systems Inc. is the principle 1934 supply chain commercial entity within the Johnson and Johnson 1935 family of companies in the United States. 1936 Securing our Nation's supply chain is an important concern for our company. We believe it is vital for the 1937 1938 patients who use our products receive our genuine products. 1939 We have already taken steps to secure our supply chain and 1940 protect our products. As a member of PhRMA and BIO and a 1941 participant in PDSA, I will share with you our perspectives 1942 on serialization and track-and-trace, our serialization

1943 experience and views on the draft legislation.

1944 Serialization regulations have become increasingly 1945 common across many countries including the European Union, 1946 Turkey, Argentina, China, India and Brazil. In the United 1947 States, the California law requires manufacturers to

serialize and pedigree all pharmaceutical products sold in 1948 1949 the State of California 50 percent of our products by January 1950 1, 2015, and the remaining 50 percent by January 1, 2016. 1951 Additionally, more than 50 percent of the States have 1952 pedigree laws with varying approaches, that is, some require 1953 electronic pedigrees, others use paper. Some start the pedigree at the primary distributors, others will start it 1954 1955 with the secondary wholesaler, et cetera. This patchwork 1956 quilt of regulations leaves us with a complicated, 1957 inefficient regulatory landscape creating unforeseen gaps where bad actors can introduce illicit drugs into the 1958 legitimate supply chain, thereby placing our citizens at risk 1959 1960 of counterfeit medicines. 1961 While the risk of encountering counterfeit medicines may 1962 be small within the legitimate domestic supply chain, when a 1963 patient receives a counterfeit medicine, the effects can be 1964 extremely dangerous, have long-lasting impact and can even be

1965 life-threatening. Our company believes that federal

1966 serialization and track-and-trace legislation is necessary to

1967 properly secure our pharmaceutical supply chain by

1968 eliminating varying and conflicting State regulations.

Federal legislation should help close the gaps where illicit 1969 1970 drugs enter the U.S. supply chain as well as provide 1971 additional mechanisms to help authenticate the legitimacy of 1972 medicines distributed and dispensed within the United States 1973 to help protect the patients who use our medicines. 1974 Next I would like to share our company's domestic 1975 serialization experience. We are preparing our packaging 1976 sites, distribution centers, business and information 1977 technology systems to serialize and track and trace our 1978 products so that we can comply with the California e-pedigree 1979 law. Here is an example of the first product that we have serialized for the U.S. market. This product is Prezista 1980 1981 600-milligram tablets. For your reference, I have attached a 1982 label of serialized Prezista 600 milligrams to my testimony. 1983 Let me draw your attention to the product license plate 1984 on the side of the label. This space is similar to the 1985 prescription drug product identifier prescribed in the House 1986 bill. We provide both machine and human readable forms for 1987 easy and accurate identification. Similarly, we apply a 1988 standard serialized barcode to every homogenous case to facilitate handling during distribution. This identification 1989

1990 space complies with both the FDA's serial number identifier 1991 quidance and the widely adopted international standards 1992 developed by GS-1. 1993 Additionally, we are establishing processes to exchange 1994 serialized data with the distributors who distribute our 1995 products and with the pharmacies that dispense our medicines 1996 to patients who need them. We are required to provide this 1997 information to the distributors and pharmacies so that they 1998 can use it to help verify both the authenticity of the 1999 package as well as the transactions related to the product. 2000 Bottom line: While it is complicated work and a lot 2001 still remains, we are doing our part to comply with the California law. However, if any States were to adopt 2002 2003 slightly different regulations, the inconsistencies could 2004 compromise the integrity of the supply chain, hence 2005 supporting the need for federal action now to secure our 2006 national security chain.

Lastly, I would like to comment on the proposed legislation. In 2011, our company along with several other PhRMA and BIO members and other supply chain participants helped form PDSA. PDSA's mission is to help enact a federal

policy proposal for one unified national system enhancing the 2011 2012 security of the domestic supply chain for patients and to 2013 define a migratory implementation pathway. 2014 Johnson and Johnson Health Care Systems supports 2015 Representatives Latta and Matheson for tackling this 2016 important issue and making progress on a legislative 2017 solution. This legislation incorporates many of PDSA's 2018 proposed provisions including a uniform national standard 2019 with a phased implementation. It is vitally important that 2020 both government and the private sector work together to protect our national drug supply in a manner that makes 2021 2022 sense. We believe this legislation will help us secure the 2023 domestic pharmaceutical supply chain by providing additional protection to our citizens, patients who depend on the 2024 2025 integrity of our medicines to treat their diseases and life-2026 threatening conditions from counterfeit medicines. Johnson 2027 and Johnson Health Care Systems' commitment to patient safety 2028 is unwavering. We look forward to Congress's enactment of 2029 this legislation and we are committed to work with Congress, 2030 the FDA and our supply chain stakeholders to implement it successfully. Again, thank you for the opportunity to 2031

2032	provide this testimony to the committee.
2033	Before concluding my remarks, I would like to recognize
2034	Steve Drucker, an industry colleague from Merck, who passed
2035	away last week. We will miss Steve's immense contributions,
2036	commitment to patient safety and especially his humorous
2037	insights. Our thoughts and prayers go out to Steve's family,
2038	especially his wife Ann and the entire Merck team.
2039	[The prepared statement of Mr. Rose follows:]

2041 Mr. {Pitts.} The chair thanks the gentleman. Dr. 2042 Davis, you are recognized for 5 minutes for an opening 2043 statement.

2044 ^STATEMENT OF TIM DAVIS

2045 Mr. {Davis.} Chairman Pitts, Ranking Member Pallone and } members of the committee, thank you for conducting this 2046 2047 hearing and for providing me the opportunity to share my 2048 perspective as an independent pharmacist and small business 2049 owner on the issue of securing the pharmaceutical supply 2050 chain. My name is Tim Davis of Beaver County, Pennsylvania, 2051 and I am the owner of Beaver Health Mart Pharmacy and have 2052 been a practicing pharmacist for over a dozen years. I am 2053 here today representing the National Community Pharmacists 2054 Association, which represents the pharmacist owners and 2055 employees of more than 23,000 independent community 2056 pharmacies in America. Our pharmacies provide over 40 2057 percent of all community-based prescriptions.

It is my belief that the United States pharmaceutical supply chain is largely safe and secure. Most pharmacists today have a heightened awareness of counterfeit or diverted drugs and therefore recognize the critical importance of purchasing medications only from trusted trading partners.

In addition, pharmacists as part of our training and daily 2063 2064 practice carefully examine both drug packaging and the drug 2065 itself to be sure there are no suspicious anomalies. 2066 It has been my observation, though, that certain types of prescription medications tend to be the target of 2067 2068 counterfeiters. Relatively expensive drugs that can be 2069 easily produced and readily sold entice these bad actors. 2070 Some drugs that I have personally seen are lifestyle drugs, 2071 such as Viagra, and very costly injectable medications such 2072 as Procrit or more recently Avastin.

2073 In response to concerns about the safety of prescription 2074 medications in the United States, over half of the States 2075 have passed drug pedigree laws that require drug products 2076 that move outside of normal distribution to be accompanied by 2077 a record of prior transactions. However, the differences in 2078 each State's laws has created a patchwork of activities 2079 across the United States. As a result, there have been past 2080 discussions about the practicality of a system that would 2081 track prescription drugs at the individual unit level. 2082 Pharmacists have had significant concerns about any system that would require each individual unit of medication to be 2083

2084 electronically scanned upon arrival in a pharmacy due to the 2085 capital, time and labor costs associated with such a system. 2086 Presently, the technologies required to implement such a 2087 system are not fully developed, designed or scaled to be 2088 feasible or affordable for use in individual community 2089 pharmacies.

2090 Of great concern is the California e-pedigree law that 2091 will begin to be implemented in 2015 that will require the 2092 electronic tracking and tracing of all drug packages in real 2093 time. This well-intentioned system will require each 2094 individual participant in the supply chain to scan each 2095 individual item to capture the transaction information. With each successive distribution, the e-pedigree must be updated 2096 with the newest transaction data as it makes its way to our 2097 2098 pharmacies. In short, our pharmacies will have the unenviable 2099 task of maintaining all drug pedigree data for all 2100 distributions and must be able to access it on demand. The 2101 cost of compliance with this law will be extremely high when 2102 factoring in both initial implementation and ongoing expenses 2103 necessary to maintain and access the data. Imposing these challenges, particularly on community pharmacies, is not 2104

2105	logical at a time when the Nation is focused on trying to
2106	reduce health care costs.
2107	All of these factors bring us to a place in which we
2108	need a uniform federal framework to provide further
2109	assurances of supply chain security and that could be used to
2110	assist federal regulators in instances of drug recalls or
2111	inquiries. We need a reasonable, commonsense federal
2112	approach that will strike the appropriate balance between
2113	enhanced patient safety and minimizing unreasonable burdens
2114	on supply chain stakeholders, particularly small business
2115	pharmacies like myself.
2116	NCPA is a member of the Pharmaceutical Distribution
2117	Security Alliance, a working group comprised of
2118	representatives of all sectors of the pharmaceutical supply
2119	chain, which has been collaborating over the past year and a
2120	half to address supply chain security issues. This group has
2121	reached a consensus around a number of topics. One is that
2122	of establishing national requirements for wholesaler
2123	licensure standards. Raising the standards for wholesaler
2124	licensure in a uniform fashion would provide the community
2125	pharmacist with an additional layer of confidence in the

integrity of the medications purchased. The second concept is 2126 2127 that of attaching a unique identifier to prescription drugs 2128 at the unit and case levels. Products would be identified 2129 with a two-dimensional matrix barcode including the serial 2130 number, lot number and expiration date. The PDSA coalition 2131 has also built consensus around being able to use the 2132 serialized identifier information to track products at the 2133 lot level. NCPA is pleased to note the inclusion of national 2134 wholesaler licensure standards, product serialization and 2135 lot-level tracking in both the recently released House 2136 discussion draft and the Senate draft. NCPA believes that 2137 the proposed lot-level system is one that could be built upon 2138 at some point in the future.

2139 Community pharmacists take very seriously our role in 2140 ensuring the safety of medications that we personally 2141 dispense to our patients and we remain committed to working 2142 with our colleagues in the supply chain as well as with State 2143 and federal authorities to make any needed improvements. 2144 Moving forward, it is essential that all stakeholders make a 2145 concerted effort to keep the lines of communication open so that consumers can continue to trust the integrity of the 2146

2147	medications that we all so depend on.
2148	Thank you.
2149	[The prepared statement of Mr. Davis follows:]
2150	************** INSERT 5 *************

2151 Mr. {Pitts.} The chair thanks the gentleman. Mr.
2152 Coukell, you are recognized for 5 minutes for an opening
2153 statement.

2154 **^**STATEMENT OF ALLAN COUKELL 2155 Mr. {Coukell.} Chairman Pitts, Ranking Member Pallone } 2156 and members of the committee, thank you for the opportunity to testify. My name is Allan Coukell. I direct drug and 2157 2158 medicine device work at The Pew Charitable Trusts, an 2159 independent research and public policy organization. 2160 Pew supports the creation of a strong national system to 2161 protect American patients from the risks of counterfeit, 2162 stolen and diverted drugs. We do so based on our analysis of 2163 the risks to the supply chain and the feasibility of 2164 solutions. The principles that I will outline today are supported by other consumer, patient, public health and 2165 2166 industry stakeholders, and I ask that a number of statements 2167 be included in the record with my written testimony. 2168 There is general agreement on the need for a national 2169 system and how it would work. Manufacturers would put a 2170 unique serial number on each package of drugs. The drugs 2171 would be tracked as they pass from hand to hand through the complex distribution system and they could be checked to be 2172

2173 sure they are authentic. This approach would bring the 2174 United States into line with other countries and individual 2175 States. Providing it creates a meaningful advance in safety, 2176 a single national system would be preferable to the current 2177 patchwork of State laws.

2178 A recent example demonstrates how verifying a serial 2179 number on a drug package could have prevented a significant 2180 crime and risk to patients. Last year, the U.S. Attorney in 2181 New York charged 48 people in a large-scale diversion scheme 2182 to buy half a billion dollars worth of medicines from patients on the street, repackage them, sometimes with fake 2183 2184 labels, and sell them back into distribution through licensed 2185 wholesalers who in turn sold the drug to pharmacies. This massive criminal recycling of government-subsidized drugs--2186 2187 similar schemes are well documented in other States--could be 2188 prevented if the drug package had a serial number and the 2189 serial number was retired after the drugs reached the 2190 This requires that pharmacies and wholesalers pharmacy. 2191 purchasing the drugs check that serial number. Without 2192 checking, the same serial, real or fake, could be sold again 2193 and again without detection.

2194 Manufacturers are already making investments in drug 2195 serialization. To justify the expense and the preemption of 2196 strong State laws, it is essential that any federal law 2197 achieve the following within a reasonable time frame: 2198 Participation of all members of the supply chain. We need 2199 traceability of drugs at the package level, not merely by 2200 lot, which can include thousands or tens of thousands of 2201 bottles, and routine checking of serial numbers. In a soon-2202 to-be-released Pew Booz Allen Hamilton report, supply chain 2203 stakeholders overwhelmingly said that all sectors, 2204 manufacturers, distributors and pharmacies, need to 2205 participate in a national system without exception. 2206 The technology is feasible, and package-level serialization and verification already exist or soon will in 2207 2208 China, Brazil, Turkey, Italy and across the EU. A system 2209 that does not track drugs by the unit level would fail to 2210 catch unsafe drugs in many scenarios. Take the example of a 2211 narcotic or any drug in shortage that is sold illegally or in 2212 the gray market. Without unit-level traceability, neither 2213 the purchaser nor an investigator would have any way to know who had sold that product or where it had come from. 2214

2215 Today, some companies are required to track a drug's transaction history through paper pedigree. An electronic 2216 2217 system would be a welcome replacement, but Congress should 2218 certainly not replace pedigrees, which are used by regulators 2219 and law enforcement, with a structure that does less to 2220 capture the chain of custody than today's systems. Regular 2221 checking of drug serial numbers by supply chain partners is a 2222 powerful way to ensure that illegitimate products do not 2223 enter distribution. Take, for example, a truckload of 2224 insulin, 129,000 refrigerated vials, that was stolen from a highway rest stop a few years ago. After several months, 2225 2226 some of that drug showed up on the shelves of chain 2227 drugstores in Texas, Georgia and Kentucky, having been handled by licensed wholesalers in at least two other States. 2228 2229 Nobody knows how much of that product was resold but only 2 2230 percent of it was recovered. We need a system that can flag 2231 suspect of illegitimate and flag it automatically.

2232 Recognizing the danger, some companies have already 2233 taken steps. For example, the pharmaceutical company EMD 2234 Serono, after its human growth hormone was counterfeited, put 2235 in place a secure distribution program with unique serial

numbers on each vial that are checked by the dispensing 2236 2237 pharmacy. The core of that program shows how a national 2238 system can work. 2239 Mr. Chairman, I thank you for this hearing and for your commitment to this issue. The discussion draft released by 2240 2241 this committee a few days ago acknowledges the risks I have 2242 been describing. We urge you now to refine it to achieve the 2243 meaningful protections called for by patient, consumer and 2244 public health groups and the others I have mentioned. 2245 Indeed, we urge you to return to the bipartisan, bicameral, two-phrase framework that you and your office and others on 2246 2247 this committee have spent much of the past year developing, 2248 an approach that every organization represented on this panel has supported. It has been 25 years since PDMA. 2249 The 2250 California law will begin to be implemented in 2 years. The 2251 opportunity for a federal system now is great. We would like 2252 to work with this committee to improve this proposal to 2253 achieve a strong national system that achieves what it must: 2254 meaningful protections for patients. 2255 Thank you, and I would welcome your questions.

2256 [The prepared statement of Mr. Coukell follows:]

2258 Mr. {Pitts.} The chair thanks the gentleman. Dr. 2259 Catizone, you are recognized for 5 minutes for an opening 2260 statement.

2261 ^STATEMENT OF CARMEN A. CATIZONE Mr. {Catizone.} Chairman Pitts, Ranking Member Pallone 2262 } and members of the subcommittee, I thank you for the 2263 2264 opportunity to be here today. The National Association 2265 Boards of Pharmacy founded in 1904 and based in Illinois 2266 appreciates the chance to share with you comments and input 2267 from the States who are currently responsible for regulating 2268 this particular situation. The issues before the committee are not new. In fact, 2269 2270 the timeline in trying to secure our Nation's prescription

2271 drug supply extends far back than we care to admit. The 2272 activities that have ensued since the enactment of the PDMA 2273 some 25 years ago can best be characterized by two words: 2274 proposed and delayed. The language found throughout multiple 2275 Federal Register notices since the implementation of the PDMA 2276 read similarly over and over. The proposals presented by the 2277 FDA and supported by the States were continuously delayed and 2278 defeated by pressure from the industry.

2279 As some of you may be aware, NABP is intimately involved

in the oversight of wholesale distributors; as a result, our 2280 2281 verified, accredited wholesale distributors program. То 2282 date, we have surveyed and accredited 552 wholesale 2283 distributors across the United States. We have observed 2284 firsthand and reported to the applicable State and federal 2285 authorities breaches in and compromises to the prescription 2286 drug supply chain. These breaches and compromises include 2287 the lack of a pedigree, the lack of complete information, the 2288 absence of any documentation, pedigrees or other transaction 2289 documents that indicate a product passed through multiple entities, some licensed and others not, multiple wholesaler 2290 2291 companies located in a one-room business office in a strip 2292 mall claiming some form of common ownership, wholesalers 2293 receiving and storing products under conditions that render 2294 the medications adulterated or contaminated, and wholesalers 2295 and pharmacies establishing as their sole business model the 2296 purchase and sale of shortage drugs and inflating the price 2297 of these products by a thousandfold, an unconscionable action 2298 when it comes to drugs that are needed by patients suffering 2299 from life-threatening diseases such as cancer.

2300 The States are both the frontline and last defense in

the prescription supply chain. Together with NABP, they have 2301 2302 forged an effective public-private partnership. That 2303 partnership was recognized by the Institute of Medicine in 2304 its report ``Countering the Problem of Falsified and 2305 Substandard Drugs.'' The report notes that crime and 2306 corruption drive the business of falsified medicines and that 2307 medicines can change hands many times in myriad countries 2308 before they reach patients.

2309 One of the primary recommendations of the IOM that is 2310 critical to the considerations before this committee and 2311 bears noting this afternoon was a recommendation they made in regard to NABP, and I quote: ``The IOM committee calls for 2312 2313 strengthening the drug distribution system in order to 2314 improve the quality of medicine and protect consumers. Top 2315 among its priorities is restricting the U.S. wholesale market 2316 to firms vetted by the National Association of Boards of 2317 Pharmacy. This action would tighten the American drug 2318 distribution chain and build momentum for better controls on 2319 drug wholesalers in developing countries.''

2320 NABP supports the implementation of a national system 2321 for the oversight and regulation of prescription drug supply

chain provided such system is comprehensive and does not 2322 2323 discard the protections already in place and ready for 2324 implementation by the States, particularly California. Ιt 2325 should take into account the existing and successful public-2326 private partnership established between the States and NABP 2327 endorsed by the Institute of Medicine and operating 2328 effectively at no cost to the American taxpayers. NABP calls 2329 for no further delays. The time has long passed for the 2330 continued delay in addressing and resolving the challenges 2331 confronting our Nation's prescription drug chain. NABP requests that all participants in the supply chain be 2332 2333 accountable. Exemptions should not be granted to pharmacies. 2334 NABP supports the tracking and traceability of products to 2335 the package level and made operational in 2015 and 2016 in 2336 order not to retreat on advances made by California and the 2337 timeline already committed to by a growing number of the 2338 industry. NABP supports pharmacies and wholesale 2339 distributors being required to append and pass pedigrees or 2340 other equivalent transaction documents within the next 2 to 4 2341 years, and NABP supports providing the Food and Drug Administration with the full scope of authority and resources 2342

2343	needed to implement and enforce a national system.
2344	We thank you for the opportunity.
2345	[The prepared statement of Mr. Catizone follows:]
2346	*************** INSERT 7 **************

2347 Mr. {Pitts.} The chair thanks the gentleman. Mr. 2348 Berghahn, you are recognized for 5 minutes for an opening 2349 statement.

2350	^STATEMENT OF WALTER BERGHAHN
2351	} Mr. {Berghahn.} Thank you, and good afternoon.
2352	Chairman Pitts, Ranking Member Pallone and members of the
2353	committee, I appreciate the opportunity to be here and share
2354	my perspective on this matter. My name is Walter Berghahn.
2355	I am the Executive Director of the Healthcare Compliance
2356	Packaging Council, a trade association dedicated to improving
2357	medication adherence and patient safety through broad
2358	adoption of innovative packaging. The HCPC represents
2359	packaging material and machinery suppliers as well as
2360	contract packagers. The members serve as pharmaceutical
2361	manufacturers and pharmacy both institutional and retail.
2362	The HCPC supports California's SB 1307 and the work of this
2363	committee, recognizing that we share the common goal of a
2364	secure supply chain.
2365	The U.S. pharmaceutical supply chain is primarily safe.
2366	Drugs are produced, packaged and shipped according to FDA
2367	guidelines. They travel through a complex supply chain and

2368 arrive at the appropriate pharmacy, hospital and nursing home

mostly without incident. That sounds wonderful, but that is 2369 2370 not why we are here today. We are here because there are 2371 many groups intent on selling counterfeit or gray market 2372 drugs into the U.S. supply chain despite a tremendous effort 2373 over the last 10 years to secure the supply chain. 2374 Counterfeits are still appearing. The FDA has opened more 2375 investigations in recent years than ever before, more than 70 2376 incidents in 2010 alone. 2377 Some suggest that the cost to fix it is too high and the 2378 supply chain is safe enough. I am betting that those people have never had a family member ingest or inject a counterfeit 2379 2380 medication and suffer the health consequences. 2381 It has been suggested that serialization and barcoding 2382 technology is not mature or scalable enough for this task, 2383 and yet barcoding has been used since the 1970s. It is found in every store and pharmacy in America. Two-dimensional 2384 2385 barcoding required for serialization is newer but well 2386 established. The Department of Defense issued a paper in 2387 2005 outlining their use and implementation of 2D barcoding 2388 for tracking valuable items in both forward and reverse logistics. Every day, tens of millions of packages are 2389

tracked by FedEx and UPS utilizing serialized barcodes. 2390 2391 Every day, 1-1/2 million U.S. air travelers board planes 2392 using 2D serialized barcodes. I am not suggesting the 2393 process will be easy for pharmaceuticals but the technologies 2394 employed are proven and they are widespread. 2395 California led the way on serialization with SB 1307 2396 with initial targets in 2007 and subsequent delays allowing 2397 industry time to comply. I am sure you are familiar with the 2398 timeline. Pharmacy would be the last to comply in July of 2399 2017, a full 4 years from today. The HCPC hopes that the federal legislation will support SB 1307 and not undermine 2400 2401 its progress. 2402 The packaging machinery industry is prepared to help meet these deadlines. Systems ranging from manual to fully 2403 2404 automated exist which apply, verify and aggregate 2D barcoded 2405 containers to cases. Companies such as Systech, Optel, 2406 Seidenader, Omega and numerous others are delivering these 2407 systems to branded and generic pharmaceutical manufacturers 2408 today. Dozens of systems have been installed in the United 2409 States in anticipation of California's deadlines. Hundreds more are being planned, ordered and constructed now. 2410 Α

larger number of systems have already been deployed globally 2411 2412 to meet international requirements for serialization in 2413 countries like China, Brazil, Turkey, India and a large 2414 portion of the EU. 2415 All this work does wonders for securing the normal 2416 supply chain but we would be remiss if we didn't consider the 2417 many documented problems occurring outside normal channels. 2418 So how do we detect those instances? In my opinion, the best 2419 way would be to provide prescriptions the way most of the 2420 world does: in the manufacturer's original container. This would accomplish two things. It thwarts the introduction of 2421 2422 counterfeit products in pharmacy as well as dispensing of outdated and returned product, all unfortunately well 2423 2424 documented. Secondly, it would allow the insurance industry 2425 to mandate the use of a serial ID for reimbursement, not 2426 simply the NDC number. This practice would greatly reduce 2427 prescription fraud. The government via CMS and the Veterans 2428 Administration is the largest payer in the United States and 2429 would see the largest benefit from this practice.

2430 This is relevant because even the physicians cited in 2431 the recent Avastin counterfeit case in California need to

submit for reimbursement. Today, all they need is a valid 2432 2433 NDC number. In the future, requiring a serial number for 2434 reimbursement could block illegally purchased items from 2435 being distributed. California has documented cases where 2436 pharmacists have illegally purchased product over the 2437 Internet and dispensed them in pharmacies, submitting for 2438 reimbursement with a legitimate NDC. Could lot-level 2439 tracking have stopped this?

2440 In conclusion, I would like to address one of the major 2441 differences between the proposed methodologies being 2442 considered. The debate is item-level tracking versus lot-

2443 level tracking. To be sure, lot-level tracking is less 2444 cumbersome on industry players but one must question its effectiveness. Lot-level tracking will provide tools for 2445 2446 evaluating what happened, why a counterfeit drug got in the 2447 supply chain. Item-level track-and-trace will prevent it. The difference is staggering: prevention versus detection 2448 2449 after the fact. I would hope that in considering which path 2450 to pursue, members will look at past instances of 2451 counterfeiting and ask a simple question: would lot-level tracking have prevented this product from entering the supply 2452

2453	chain?
2454	Thank you for the chance to contribute to this.
2455	[The prepared statement of Mr. Berghahn follows:]
2456	************** INSERT 8 *************

Mr. {Pitts.} The chair thanks the gentleman. That concludes the opening statement of our second panel. At this time I would like to request unanimous consent to place a statement from the National Association of Chain Drugstores into the record. Without objection, so ordered. [The information follows:]

Mr. {Pitts.} You have a UC request? Mr. {Pallone.} Mr. Chairman, I would ask unanimous consent to enter into the record a letter from EMD Serono. Mr. {Pitts.} Without objection, so ordered. [The information follows:]

2470 Mr. {Pitts.} All right. I will begin the questioning 2471 and recognize myself 5 minutes for that purpose. 2472 I will start with Ms. Gallenagh. Talk a little bit about the California model. Would the California model work 2473 2474 on a national level? Would you describe some of the 2475 consequences for patients and industry and others? We will 2476 go down the line and start with you, Ms. Gallenagh. 2477 Ms. {Gallenagh.} Sure. Based on what we know right now, a lot depends on the time frames that would be set forth 2478 on a national level. The California dates currently, in my 2479 2480 opinion, would not be practical for a national model. 2481 Additionally, there is a piece of the California law that is providing to be particularly difficult in piloting, and that 2482 2483 is the electronic pedigree portion of the law that also goes 2484 along with full track and trace of product electronically throughout the supply chain. And these are right now, based 2485 2486 on what we are learning through experimenting with the processes and the technology very difficult for industry. 2487 Mr. {Pitts.} Ms. Simmon? 2488 Ms. {Simmon.} Thank you. Yes, we would echo that. 2489 You

2490	know, some of the necessary technology, speaking from a
2491	manufacturer's point of view, just isn't really there yet.
2492	Aggregation of units to cases and pallets is not ready to be
2493	deployed with a high level of accuracy for the data that
2494	would be required, and some of the interoperability standards
2495	for the data are not yet solved. With the compliance dates
2496	only 2 years ago, you know, we feel that is moving too
2497	quickly to avoid some unintended consequences.
2498	Mr. {Pitts.} Mr. Rose, would you comment on the
2499	consequences for industry and patients?
2500	Mr. {Rose.} Consequences on patients?
2501	Mr. {Pitts.} Both industry and patients.
2502	Mr. {Rose.} Okay. For industry, you know, we brought a
2503	sample of our product where we have applied the 2D data
2504	matrix code with a serial number on it.
2505	Mr. {Pitts.} And would you point out what you said in
2506	the testimony?
2507	Mr. {Rose.} Right here we have the 2D data matrix code,
2508	and then here we have human readable format where we have put
2509	the serial number in there as well as the product code and
2510	expiration date and lot, and you can read it human readable

or via machinery. This took a lot of work to get going. 2511 The 2512 next phase we are working on right now is exchanging data 2513 with our trading partners. Those standards don't exist. We 2514 don't have guidance from California on those data standards, 2515 and we are missing those. That is very important to have for 2516 us to be fully compliant with the California law. So to 2517 achieve this date, we need those standards to be put in place 2518 but then also we have to put those systems in place to be 2519 able to exchange that data with our trading partners.

2520 Mr. {Pitts.} Dr. Davis, would you care to comment? Mr. {Davis.} I think that from a community pharmacist's 2521 2522 perspective that it would be relatively difficult for us to 2523 comply nationwide because of a couple of reasons. One would 2524 be the ability to absorb and to maintain the costs associated 2525 with the system, and two, to access and be able to implement 2526 the technologies surrounding it. This is something external 2527 to all of our current processes in the field of pharmacy, and 2528 we don't want to necessarily lose the relationships and 2529 patient care experiences that we have currently in place in 2530 lieu of trying to comply by another national standard. Mr. {Pitts.} Now, I posed several of these questions to 2531

2532	FDA earlier today, and I would like to get the opinion of
2533	actors on the ground working to manufacture and distribute
2534	and dispense our Nation's drug supply, so if you will please
2535	respond. Will national uniformity increase the security of
2536	the supply chain and improve patient safety, Ms. Gallenagh?
2537	Ms. {Gallenagh.} Yes.
2538	Mr. {Pitts.} Ms. Simmon?
2539	Ms. {Simmon.} Yes, it would.
2540	Mr. {Pitts.} Mr. Rose?
2541	Mr. {Rose.} Yes, it would.
2542	Mr. {Pitts.} Dr. Davis?
2543	Mr. {Davis.} Yes.
2544	Mr. {Pitts.} What about, is it important to preserve
2545	the States' ability to license and enforce national
2546	standards?
2547	Ms. {Gallenagh.} I would say yes, it is important so
2548	that they have a role to partner with FDA.
2549	Mr. {Pitts.} Ms. Simmon?
2550	Ms. {Simmon.} Yes, we would agree as well.
2551	Mr. {Rose.} Yes, we would agree as well.
2552	Mr. {Davis.} Yes.

2553 Mr. {Pitts.} Will product serialization increase the 2554 security of the supply chain and improve patient safety? 2555 Ms. {Gallenagh.} Yes, absolutely. 2556 Ms. {Simmon.} Yes, we definitely favor product 2557 serialization. Mr. {Rose.} We agree with product standardization. 2558 2559 Mr. {Davis.} And we agree with it as well in a phased-2560 in approach so that we can build our systems and our 2561 capabilities without compromising patient care as it stands today. 2562 Mr. {Pitts.} All right. Will data exchange and systems 2563 2564 between actors in the supply chain increase the security of 2565 our drug supply and improve patient safety? 2566 Ms. {Gallenagh.} Yes. 2567 Ms. {Simmon.} Yes, it would. 2568 Mr. {Rose.} Yes, it would. Mr. {Davis.} Yes, it would. 2569 2570 Mr. {Pitts.} And finally, would a national track-and-2571 trace standard increase the efficacy of product recalls? 2572 Ms. {Gallenagh.} Yes, it would. Ms. {Simmon.} Yes, we believe it would. 2573

2574 Mr. {Rose.} Yes. 2575 Mr. {Davis.} Yes, it would, sir. 2576 Mr. {Pitts.} Thank you. I have gone over time. The 2577 chair recognizes the ranking member, Mr. Pallone, 5 minutes 2578 for questions. Mr. {Pallone.} I just wanted to follow up on Mr. Pitts' 2579 2580 question going down the line, a yes or no because I have 2581 other questions. So okay, 2 years you are saying isn't 2582 workable but what about 10 years? Can the issues that we 2583 referenced here, you know, track and trace, unit level, can they be worked out by then over 10 years? Yes or no, Ms. 2584 2585 Gallenagh? 2586 Ms. {Gallenagh.} I think that it is possible to get to a next step. I think that --2587 2588 Mr. {Pallone.} I am trying to get a yes or no, though, 2589 because otherwise I am going to run out of time. Or if you 2590 don't want to say yes or no, you can say maybe. 2591 Ms. {Gallenagh.} I would say maybe. 2592 Mr. {Pallone.} All right. Ms. Simmon? Ms. {Simmon.} I would say maybe if it is a stepwise 2593 2594 approach.

Mr. {Pallone.} All right. Mr. Rose? 2595 2596 Mr. {Rose.} Yes, it would. 2597 Mr. {Pallone.} Dr. Davis? 2598 Mr. {Davis.} And I agree with the phased-in approach as 2599 well. Mr. {Pallone.} Mr. Coukell? 2600 2601 Mr. {Coukell.} Can I make a very brief response, Mr. 2602 Pallone? 2603 Mr. {Pallone.} Please. 2604 Mr. {Coukell.} The question was asked earlier, would serialization--2605 Mr. {Pallone.} Yes, no or maybe. I am sorry. 2606 2607 Mr. {Coukell.} Yes. 2608 Mr. {Pallone.} Okay. Dr. Catizone? 2609 Mr. {Catizone.} Two answers. Based upon existing 2610 technology, yes. Based upon the history of the industry in 2611 this regard, 25 years has not been enough time so they will 2612 probably say 10 won't work either. 2613 Mr. {Pallone.} All right. Mr. Berghahn? Mr. {Berghahn.} Yes, I think it is possible. 2614 Mr. {Pallone.} Okay. I mentioned in my statement, I 2615

have a lot of concerns with the Republican bill. We spent 2616 2617 many months engaged with members on a bipartisan, bicameral 2618 basis discussing and learning about the problems associated with the security of our drug distribution system, but to put 2619 it simply, the draft just doesn't reflect where we landed at 2620 2621 the end of those discussions or anything close, in my 2622 opinion, and the House Republicans, as I said, didn't consult 2623 with us before putting the draft out so I am disappointed, to 2624 say the least. But I would like to hear from some of you--I can't do everybody--on what you think is lacking in the bill. 2625 So let me start with you, Mr. Rose. What important aspects 2626 2627 of a track-and-trace system is lacking or need improvement in 2628 the House draft?

2629 Mr. {Rose.} What we really need at this point in time 2630 is where are making our investments is a clear end game. We 2631 need to know where the goalpost is fixed. We have to--if we 2632 are making investments to put serialized numbers on our 2633 product and then also to exchange data, we want to make sure 2634 that the other parties in the supply chain are also using those numbers and using that information to verify the 2635 2636 product and the accuracy and the veracity of that product and

then also the transactions associated with the product. 2637 2638 Mr. {Pallone.} All right. Same for you, Ms. Gallenagh. 2639 Ms. {Gallenagh.} Yes, I think that is correct. In our opinion, once we have serialization, there are many things 2640 that are possible with this but the one thing that differs 2641 2642 between the past drafts is to not get to a clearly defined 2643 place or year date certain for traceability. We do think, 2644 though, that the bill draft does lay out the foundation to 2645 get there. The core elements again, as we have mentioned, and beginning with serialization and lot traceability, we do 2646 think that those are important steps that have to be taken 2647 2648 before you get to that end phase. 2649 Mr. {Pallone.} Okay. Mr. Coukell? 2650 Mr. {Coukell.} The current House draft immediately bans 2651 all State pedigree laws and doesn't replace them with

anything for a period of many years, and it never gets to the second phase that we need to get to. It is like building a set of steps to your front door, building the first step now and having a plan to come back and put the second step on some time later.

2657 Mr. {Pallone.} Dr. Catizone?

Mr. {Catizone.} All the points that were previously 2658 2659 made except it should not preempt State laws at this point 2660 because if it does so, there is no protection for the 2661 consumer. Two, I am confused by the argument about clear standards. They are needed. In 1998, NABP offered to 2662 2663 develop national standards. Some people sitting at the table 2664 said the industry would do that. It is 25 years later. We 2665 still don't have those standards so I am not sure the 2666 standards are the barrier. The standards can be built and 2667 done so I believe clear direction, no delays, an implementation timeline and standards should be developed as 2668 quickly as possible. 2669 2670 Mr. {Pallone.} Thank you. And finally, Mr. Berghahn? Mr. {Berghahn.} Yes, I think one of the main concerns 2671 2672 is the lack of the unit-level trace and the lack of 2673 requirements for people in the supply chain to use it. 2674 Without that, you really lose visibility on the product and 2675 you decrease safety. 2676 Mr. {Pallone.} Well, thank you. I am sorry I couldn't get to all of you but my time is limited. 2677

2678 I just wanted to reiterate that I am disappointed in the

bill. The Senate released a draft last week that was an 2679 2680 obvious attempt to address the views of Members on both sides 2681 of the aisle. It represents a compromise, and I regret that 2682 the House Republicans felt the need to sway so far from the good work that so many Members have put into this issue 2683 throughout the last year. So hopefully we can still come up 2684 2685 with a good product. I yield back, Mr. Chairman. 2686 Mr. {Pitts.} The chair thanks the gentleman and 2687 recognizes the gentleman from Virginia, Mr. Griffith, 5 2688 minutes for questions. Mr. {Griffith.} Thank you, Mr. Chairman. 2689

Dr. Davis, as you may have heard earlier, I represent a rural area with a lot of community pharmacists, and I want to focus your questions in regard to the e-pedigree program in California. How familiar are you with that program? Mr. {Davis.} I have a cursory understanding of the specifics of it but again, I understand the concerns of my colleagues in that State as well through discussions.

2697 Mr. {Griffith.} Well, let us talk about that. Do you 2698 know how the small pharmacies, the small-town pharmacies in 2699 California are dealing with that?

2700 Mr. {Davis.} We are still a few years away from 2701 pharmacies having to assume responsibility for their 2702 component of the program. But that being said, there are 2703 concerns surrounding the ability to absorb the costs and the labor associated with such a system. 2704 2705 Mr. {Griffith.} Now, I understand you are not facing 2706 that, but have your colleagues in California given you some 2707 idea of what those costs would be for a small-town pharmacy? 2708 Mr. {Davis.} Well, they range. Our problem is, our 2709 margins continually shrink at this point, and we have less 2710 and less to work with and still maintain our practices as our 2711 communities expect them to be maintained. That being the 2712 case, the estimates from colleagues range anywhere from 2713 thousands of dollars to having to remove employees from their 2714 work staff to replace them with this process. So the clear 2715 projections aren't intact at this point but there is a 2716 significant impact that is going to either impact the 2717 profitability and the ability for that business to support

2718 its community, or the profitability of the business being

2719 able to support its current employee structure.

2720 Mr. {Griffith.} And as a part of those concerns, are

2721	there concerns that some of the small-town pharmacies won't
2722	be able to survive with this cost?
2723	Mr. {Davis.} Well, and that is always a question. I
2724	would say 99 percent of our technology spent over the past
2725	decade has been to comply with regulations and maintain
2726	technology and processes to comply by State and federal
2727	regulations. That being said, we are worried that sooner or
2728	later our spend, our technology spend and our process spend,
2729	is going to outpace our ability to absorb it, and there will
2730	be doors that close unfortunately.
2731	Mr. {Griffith.} Okay. So there is some concern that
2732	some of the pharmacies won't make it, and if that pharmacy
2733	happens to be in a small town and the next town over is on
2734	the other side of a mountain and 40 miles away, I am going to
2735	ask a question that I already know the answer to, but how
2736	does that impact the patient?
2737	Mr. {Davis.} I come from a region very much like that,
2738	and what happens is, we see that patients are always trying
2739	to seek out the best care that they can at any given moment.
2740	That limits the patient's access to care and access to the
2741	best care that they can possibly get in their locations.

2742 Mr. {Griffith.} And in many cases, it is not just getting, you know, the prescription filled, it is that trust 2743 2744 that has been built up. Sometimes you have -- in fact, my 2745 pharmacist is the son of the pharmacist that we used when I was a child, and that trust has built up and so a lot of 2746 2747 times there is a certain element of, you know, do you think 2748 this is--am I doing the right thing heading down this 2749 direction or they will come in and they will just chitchat 2750 about what is going on in their health care, and particularly 2751 for senior citizens, they may be getting different prescriptions from different folks and sometimes having that 2752 2753 resource is very valuable, is it not? 2754 Mr. {Davis.} I agree, and most of my patients held me 2755 as a baby, so when I look them in the eye and I dispense 2756 medications or prescriptions to them, that is why this topic 2757 is so very valuable to me. I need to know that I am taking care of their families much like they took care of mine 2758 2759 through patronage and loyalty. So making sure that we 2760 provide safe, secure and efficient medications for them on a 2761 regular basis is paramount. My dad always said always make the best decision for your patient and you have made the best 2762

decision for your company, and we are trying to do that in 2763 2764 this day and age with this particular topic as well. 2765 Mr. {Griffith.} Yes, and I can't remember what the specifics were but I do know that in regard to one of my 2766 children, we went to get the prescription and the doctor 2767 2768 looked at it and he said but isn't he also taking this, let 2769 me call your doc, and called the doc and they changed the 2770 prescription, and I think that is very valuable, and in rural 2771 areas, if you eliminate that community pharmacist, you have 2772 eliminated a valuable part of that tool. And so that is why I think it is proper that we move forward with a plan but 2773 2774 also that we do it in a way that the community pharmacists 2775 don't get left out of the formula. 2776 Mr. {Davis.} Thank you, sir. 2777 Mr. {Griffith.} I appreciate it, and yield back my 2778 time. 2779 Mr. {Pitts.} The chair thanks the gentleman and now 2780 recognizes the gentlelady from California, Ms. Capps, 5 2781 minutes for questions. 2782 Mrs. {Capps.} Thank you, Mr. Chairman. Dr. Catizone, I would like to ask you about the role 2783

wholesale distributors play in the integrity of the drug 2784 2785 distribution supply chain. I know that FDA has stated in its 2786 reports on counterfeit drugs that counterfeit drugs are most 2787 likely to be introduced as a part of a supply chain that involves multiple wholesaler. That is correct, right? 2788 2789 Mr. {Catizone.} Yes. Mrs. {Capps.} Because of widespread abuses in the early 2790 2791 2000s, many States have tightened their licensure 2792 requirements. I believe Florida and California have 2793 especially strong licensure requirements, which they adopted 2794 to address specific problems that they had identified. 2795 However, there is, as you know, a wide variation in the rigor 2796 of different State requirements leaving many vulnerabilities 2797 in the system nationwide. My question is whether you agree 2798 that there is wide variation in State requirements for 2799 wholesale licensing and what has been the public health effect of these varying State requirements? 2800 2801 Mr. {Catizone.} There is variation but not as wide as I 2802 think people have reported. As an explanation, the primary 2803 wholesaler since the PDMA have done an outstanding job of cleaning up the industry and making sure the supply chain has 2804

its integrity and validity. We have seen problems with 2805 2806 secondary wholesalers and pharmacies entering the picture. 2807 The patchwork among the States is being equalized through the 2808 accreditation program that we have, which has become a de facto national standard, and for States waiting to see what 2809 2810 happens with California. If California moves forward, other 2811 States would follow suit and that would become a national 2812 standard across the board.

2813 Mrs. {Capps.} Okay. Given these differences, you say 2814 they are not as wide as we have been led to expect. Do you 2815 see any role for the FDA in setting federal standards for 2816 wholesale?

2817 Mr. {Catizone.} Yes. What we talked about earlier, the 2818 need for standards, the FDA's role is critical to this 2819 process because the States have tried to put together a 2820 patchwork and we need that overseeing nationally.

2821 Mrs. {Capps.} I get you. So thank you. And now I 2822 would like to get your views on the wholesale distributor 2823 licensing provisions of the House bill. It does require FDA 2824 to set licensure standards for all wholesale distributors. 2825 It also requires wholesale distributors to report annually to

the FDA their name, address, dates in which they are licensed 2826 2827 and any disciplinary actions that have been taken against 2828 The FDA would be required to publicly post the names them. 2829 of all wholesale distributors and the States in which they are licensed on their web page. However, the public would 2830 2831 not be able to see the disciplinary actions that have been 2832 taken against any wholesalers that are on this site. In 2833 other words, that is not required in the bill. States would 2834 also be prohibited from having any licensure requirement 2835 except those established by FDA. Essentially, the new FDA standards could be seen as both a floor and a ceiling. 2836 2837 Coming from a State like California with strong licensure 2838 standards, naturally I am concerned about that. So my question to you is whether you believe it is appropriate or 2839 2840 necessary for the bill to prevent States from establishing or 2841 maintaining stricter standards or additional requirements to 2842 address local problems a particular State may have 2843 experienced. In other words, is this going to prevent kind 2844 of individual States from addressing their own situations? 2845 Is there any public health benefit to the kind of system being described? 2846

2847 Mr. {Catizone.} The answer is yes, it will prevent, and 2848 we are sympathetic to the industry establishing some sort of 2849 uniform process, so we would support that, but the States 2850 need the discretion to act where there is a significant 2851 occurrence within their State, and we believe the bill would 2852 address that and even allow the States to be included in 2853 discussion. That would be critical.

In regard to the posting of information in response to the compounding issue, we will soon provide a listing of all the pharmacies in the United States, where they are licensed, what disciplinary action has been taken and whether or not they have been inspected. We can put that same system in place for wholesalers that we have accredited as well at no charge for the public.

2861 Mrs. {Capps.} Thank you very much. I just have a few 2862 seconds, but Mr. Coukell, could you give us your opinion on 2863 these provisions in the House bill? I know it is going to be 2864 brief.

2865 Mr. {Coukell.} In the interest of time, I will second 2866 what Dr. Catizone said. We think national standards are very 2867 desirable. There is an important role for FDA to play there

2868	but we don't want to tie the hands of States at being able to
2869	respond to local conditions.
2870	Mrs. {Capps.} I see a couple of heads nodding. Is this
2871	shared by anybody else on the panel? Could you indicate?
2872	Mr. {Davis.} We agree as well. National standards, I
2873	think, would make it easier for pharmacists to be able to
2874	access and purchase and manage prescription products
2875	throughout the United States with some conformity.
2876	Mrs. {Capps.} Thank you. Mr. Chairman, I yield back.
2877	Mr. {Pitts.} The chair thanks the gentlelady and now
2878	recognizes the gentleman from New Jersey, Mr. Lance, 5
2879	minutes for questions.
2880	Mr. {Lance.} Thank you very much, Mr. Chairman.
2881	To Mr. Rose from J&J, I think New York recently proposed
2882	supply chain security legislation similar to standards in
2883	California. New York is obviously our neighboring State in
2884	New Jersey, and in fact, many pharmaceutical companies in the
2885	district I serve have employees from New York. If the
2886	California law were fully enacted and if New York follows
2887	suit we will have two highly populated States on opposite
2888	sides of the country requiring a varying degree of standard

by which the entire industry from the manufacturer all the 2889 2890 way to pharmacists must comply. You cite in your testimony a 2891 patchwork quilt of regulations, and I am interested in 2892 knowing how exactly would establishing a uniform tracking 2893 system ensure patient safety. 2894 Mr. {Rose.} Thank you for that question. What it would 2895 do is, it would give us security through the whole Nation. 2896 These labels that we are putting on our product, this product 2897 is sold throughout the State, or throughout the country, and 2898 we are talking about interstate commerce here. When we manufacture it, we don't manufacture for New York or 2899 2900 California or Florida. 2901 Mr. {Lance.} You do it for the entire Nation. Mr. {Rose.} The entire Nation, and so as a result, we 2902 2903 have this system in place. The entire Nation would benefit 2904 from this. All the citizens throughout the Nation would 2905 benefit from this system. It would provide a veil and 2906 umbrella over top of the supply chain, ensuring that we would 2907 keep counterfeit products out of the supply chain. It would 2908 give us another level of mechanism, another layer which we could prevent counterfeits from getting in the supply chain 2909

2910 throughout the Nation.

2911 Mr. {Lance.} Thank you. Your testimony reflects a 2912 strong commitment to patient safety. How often are products 2913 compromised? Under the current system if a product is 2914 compromised, how is the manufacturer, J&J or others, alerted 2915 to an issue, and how do you address the problem? 2916 Mr. {Rose.} We are alerted to it in many ways. We may have received a call from a patient. We may hear from a 2917 2918 doctor or a pharmacist. We have mechanisms in which we 2919 handle those calls, and we receive it and then we do an investigation of whether or not that is a counterfeit product 2920 2921 or not. So we have mechanisms which we put in place to 2922 verify the authenticity of that product and then determine 2923 what the next steps might be. 2924 Mr. {Lance.} Thank you. Would anyone else on the panel

2925 like to comment on my questions? Yes, sir.

2926 Mr. {Coukell.} Just briefly. I don't think we know how 2927 common it is. There was a story in the newspaper this week. 2928 It was a tiny story--I think it maybe only ran in Chicago--2929 about a pharmacist who had bought counterfeit drugs from 2930 China, I believe it was, and was dispensing them to patients

and had been caught doing that. We don't know how common 2931 2932 that is, and that is not to tarnish the industry. You know, 2933 99.99 percent of them are good guys and the supply is 2934 generally safe but how common are these problems? I don't 2935 think we know. 2936 Mr. {Lance.} Would anyone else like to comment? Dr. 2937 Davis? 2938 Mr. {Davis.} I think that again, the pharmaceutical 2939 industry, specifically, independent community pharmacists, rely on the rapport that we create with our patients, and it 2940 is very important for us to maintain that position. That 2941 2942 being said, we take counterfeit medications, diverted 2943 medications and how we access and purchase medications in the industry very, very seriously. So that inherently adds a 2944 2945 level of security that exists today. 2946 Mr. {Lance.} Thank you. Dr. Davis, let me say that I 2947 come from a small town and from a small family law practice, 2948 and we rely on a family pharmacy in a small town, and I know

2949 that there are many across America who rely on the good work 2950 of family pharmacies across this great country.

2951 Thank you, Mr. Chairman. I yield back the balance of my

2952 time.

2953 Mr. {Pitts.} The chair thanks the gentleman and now 2954 recognizes the gentleman from Utah, Mr. Matheson, 5 minutes 2955 for questions.

2956 Mr. {Matheson.} Thanks, Mr. Chairman, and I do want to 2957 thank all the stakeholders, more than just for being here 2958 today but there has been a lot of stakeholder involvement for 2959 a long time on this issue. I appreciate everyone spending 2960 the time to try to come up with a solution.

I have said it in my earlier comments: I think we need a uniform standard in place, a national standard, and it is really for two things. It is to ensure integrity of the drug supply chain at a national level and also alleviate operational burdens. It also is to prevent counterfeit or diverted product from reaching consumers.

2967 So my first question is to Ms. Gallenagh. I was 2968 wondering if you could--you mentioned both the concern about 2969 operational burdens for stakeholders and the problem with 2970 counterfeit product hitting the market. Can you describe for 2971 me the operational challenges that your member companies 2972 would face in delivering product to their downstream partners

across the country in a situation with no national standard 2973 2974 and as different State laws go into effect? 2975 Ms. {Gallenagh.} Absolutely. As you already know, HDMA 2976 members are primary wholesalers, so they purchase directly from the manufacturer in most cases and provide their 2977 2978 products directly to the pharmacy and providers. The 2979 challenge with a 50-State approach, particularly when we 2980 start talking about not just pedigree but when we start 2981 talking about serialization and traceability really is the 2982 great unknown. If we are working on systems to be developed for California, for instance, that is one thing, but we 2983 operate national companies, much like the manufacturers. 2984 2985 While we are not manufacturing product and we are not actually serializing that product, we will have to have the 2986 2987 systems in place to be able to move it within our 2988 distribution networks, not just for the State of California but across the country. If we have a different standard for 2989 2990 California than, for instance, in New York, which is also 2991 looking at this in their state legislature, then we have to 2992 segregate product according to region, and it makes it very difficult to know what types of systems we need to develop. 2993

2994 Mr. {Matheson.} Do you have thoughts or can you 2995 elaborate on how a bad actor might circumvent more stringent 2996 State laws to introduce an adulterated product into a supply 2997 chain that doesn't have the national standard? 2998 Ms. {Gallenagh.} Sure. I think, you know, one of the 2999 problems with variation in State licensure was is one, the 3000 requirements. For example, some States don't choose to 3001 inspect wholesaler facilities when they are actually issuing 3002 licenses, and so then you end up with, you know, sort of fly-3003 by-night actors or maybe substandard companies applying for 3004 and receiving licenses, and this has been shown to be a 3005 problem in States like Florida where when they did raise 3006 their licensure standards, they eliminated, you know, 3007 hundreds of bad actors and really not legitimate companies. 3008 I think that the other part of this, though, is also not just 3009 the variation in requirements but the variation in actually having to meet a standard bar, you know, one kind of uniform 3010 3011 set of requirements so that a bad actor can't move to the 3012 next State and get a license there, for instance. 3013 Mr. {Matheson.} Mr. Rose, in your testimony you

3014 described your company's experience with serialization of its

3015 products. You know, this is something that has been included 3016 in this discussion draft. Can you discuss the role that 3017 serialization plays in strengthening the integrity of the 3018 drug supply chain both in the near-term impact it could have 3019 as well as the role it would play in the longer term? 3020 Mr. {Rose.} Sure. In the near term, I think what it 3021 gives us is a capability that would be available in our 3022 product if we just looked at the discussion draft in its 3023 current form. You would have a serialized number on there 3024 that could then be verified, and that becomes important. Ι think what we would like to see as an end game is where every 3025 3026 party in the supply chain is accountable for using that 3027 serial number and then also the information that is passed along with it. So we really believe that simple act of 3028 3029 scanning that barcode becomes very, very important to help 3030 verify that package and ensure that it is the genuine package 3031 and then also the transactions that are associated with that 3032 package that can verify those transactions as well. 3033

3033 Mr. {Matheson.} Thanks. Mr. Chairman, I will yield 3034 back.

3035 Mr. {Pitts.} The chair thanks the gentleman and now

recognizes the gentleman from Texas, Mr. Green, 5 minutes for 3036 questions. 3037 3038 Mr. {Green.} Thank you, Mr. Chairman. I got back just 3039 in time. 3040 Mr. Coukell, I have some questions about the time frames 3041 set up in the House bill. As you know, it doesn't require 3042 much until about 5 years after the enactment. At that point 3043 it would only require manufacturers to serialize their 3044 product and to begin tracing their products by lot number, 3045 not unit level. I understand that actually getting a unitlevel interoperable electronic system up and running, 3046 particularly on the federal level, will take some time and 3047 has many complications, but I am concerned the House bill 3048 3049 doesn't start us on that path soon enough. In fact, it 3050 actually prohibits FDA from going forward with a unit-level 3051 electronic system in absence of new federal legislation. My 3052 question is, can you comment on this? And I am sure we can 3053 all agree that we want to ensure that industry has a 3054 reasonable amount of time to comply with whatever federal 3055 system we put in place but do we really need to wait until 3056 2018 to even start on a lot-level non-electronic system?

3057 Mr. {Coukell.} Thank you for that question, sir. We 3058 absolutely share that concern as well as the view that the 3059 appropriate approach is to phase this in in a reasonable time 3060 frame that is something between California and what is proposed in the House draft, and I think one of the big 3061 3062 impediments to this whole area moving forward has been the 3063 lack of regulatory certainty. So leaving 10 years and still 3064 not having that certainty is likely to delay the field a very 3065 long time.

3066 Mr. {Green.} Mr. Berghahn, do you have any thoughts on 3067 that too?

Mr. {Berghahn.} Well, I think that what would be 3068 3069 important to consider is that many of the pharma 3070 manufacturers and the industry are already preparing today 3071 and putting systems in place to serialize an aggregate as we speak, and certainly allowing that to continue would be in 3072 3073 the best interests of everyone. It doesn't mean that we are 3074 going to get to a national standard in anything resembling 3075 the timelines put in place in California but it certainly 3076 means that the basis is there. I mean, California is more 3077 than 10 percent of the population of the United States, so we

could say if we allowed it to continue as scheduled that by 3078 3079 2017 10 percent of the product in the U.S. supply chain would 3080 be serialized. 3081 Mr. {Green.} Mr. Catizone, how about you on that question? I am sure we all agree but do you really need to 3082 3083 wait until 2018 even to get started on a lot-level non-3084 electronic system? 3085 Mr. {Catizone.} No, I think that is too long of a 3086 delay. I agree with the prior comments but also the caution, 3087 if this law preempts all existing State laws, there will be no oversight of the distribution system and the problems that 3088 3089 we are seeing now will increase significantly so the 3090 medications you receive and I receive and others receive will 3091 not be safe if the State laws are all preempted. 3092 Mr. {Green.} Well, I hope that we can work together to 3093 ensure we don't have unnecessary delays in implementing a 3094 federal system. Although I know that California may have 10 3095 percent, but for a fellow with my Texas accent, we might want 3096 to have our own. But I do think we need across State lines 3097 regulation as quick as possible. And again, like any other regulation, if you know it is going to happen, you can 3098

3099 capitalize it and prepare for it over a period of years and 3100 it looks like the bill may not be as aggressive as some of us 3101 would like. It sounds like some of the witnesses share it. 3102 Thank you, Mr. Chairman. I will yield back my time. 3103 Mr. {Pitts.} The chair thanks the gentleman and now 3104 recognizes the gentleman from Ohio, Mr. Latta, 5 minutes for 3105 questions. 3106 Mr. {Latta.} Well, thank you very much, Mr. Chairman. 3107 Again, thank you very much for allowing me to participate in 3108 the hearing today. I really appreciate your willingness. 3109 And again, I want to thank the witnesses that are here today 3110 for their testimony today because we have to have input from 3111 everyone, which we have been doing for quite a while now, 3112 meeting with the stakeholders. If I could start with Dr. Davis, and again, what we are 3113 3114 looking at here, what we want is safety for the patients out 3115 there. We want to make sure that the supply chain is 3116 protected, that nothing is adulterated out there, and that 3117 when someone receives a medication, they know it is safe for 3118 them to take. And I think the chairman was talking about it a little bit earlier but if I could just ask you again, what 3119

is your view of having this phased in over time instead of 3120 3121 something happening overnight? And I know that Mr. Griffith and Mr. Lance also kind of alluded to that in their 3122 3123 questioning, but if I could ask you? 3124 Mr. {Davis.} Again, I think our concern is of the level 3125 of complexity that occurs at the patient-to-practitioner 3126 level. We have a lot of very specific business rule 3127 questions surrounding lot-level versus unit-level 3128 serialization and tracking. What would happen if a patient 3129 had a prescription that we prepared for them, they decided 3130 that it was too expensive and we had already removed it from 3131 the packaging and the ability for it to be traced any 3132 further? How do we get that back into our drug supply? How do we take processes such as that to make sure that our 3133 3134 businesses remain profitable and don't waste dollars on 3135 unused inventory, unreturnable inventory? How do we access 3136 the information and utilize the information, and how do we 3137 insert those processes in our current practices? 3138 We are kind of dependent--actually, not kind of. We are absolutely dependent on our technology vendors to provide us 3139 with the capabilities, and while we are wholeheartedly in to 3140

3141	continue working with our partners to create a system in the
3142	United States and to maintain the system, we want to make
3143	sure that it is built in an efficient, affordable manner for
3144	us to implement in our communities.
3145	Mr. {Latta.} Thank you.
3146	Mr. Rose, in your testimony, you state that this
3147	legislation incorporates many of PDSA's proposed provisions
3148	including a uniform national standard with a phased
3149	implementation. I am just kind of following up on that. How
3150	important is that phased implementation?
3151	Mr. {Rose.} We believe the phased implementation is
3152	important. The California law in many regards goes from zero
3153	to 60 very quickly so you go from serialization to this
3154	interoperable system. We really believe what is important
3155	here is to make sure that we have an approach that allows
3156	parties in the supply chain to prepare properly, to adopt
3157	these systems. As Dr. Davis mentioned, the pharmacies have
3158	some work to do, so do the wholesalers and the manufacturers.
3159	We still have a lot of work to do, as I indicated in my
3160	testimony. We have to give people some time to put those
3161	systems in place and make sure, to work out the

interdependencies between the different stakeholders in the 3162 3163 supply chain. That is where the real phased-in approach is 3164 really required is, how do we exchange data with the 3165 customers that we work with. It is very, very critical to do this, and it is not just the forward supply chain but it is 3166 3167 also the reverse supply chain as well. 3168 Mr. {Latta.} Let me follow up with that. In your 3169 estimation, has California given you and the industry the

3170 guidance it needs for that operational clarity on how that 3171 law is going to work?

3172 Mr. {Rose.} We still are awaiting guidance on the 3173 interoperable system. Also, I think as I recall, and I will 3174 have to get back to you on this, but they have issued some 3175 quidance around grandfathering and I think they issued some 3176 guidance recently around inference, but we really do need to 3177 have much more guidance from them about their interoperable 3178 system, how that is going to work. That is a key piece right 3179 now.

3180 Mr. {Latta.} And I could turn real briefly, and I do 3181 mean briefly, Ms. Gallenagh, I believe we all share the same 3182 goal of improving the safety and the efficiency of the drug

supply chain, as I mentioned earlier, that we want to make 3183 3184 sure that everyone is safe out there. However, the argument 3185 has been made that what has been proposed to date doesn't go 3186 far enough to satisfy all the elements of a comprehensive 3187 system that some had envisioned. Could you in practical terms talk about how the elements of this proposal would 3188 3189 create a platform upon which to build future technologies? 3190 Ms. {Gallenagh.} Absolutely. I think the intent of the 3191 bill, first of all, starts with what we traditionally call an 3192 interim pedigree step, essentially a direct purchase option 3193 and a full pedigree option across the board so that would be 3194 uniform across the country. It sets higher licensure 3195 standards to close those gaps across the States, and I think 3196 what we are all forgetting here when we talk about looking 3197 for the perfect solution is that this draft requires 3198 serialization for all products at the unit level regardless 3199 of where they are in the United States. I think that that 3200 alone sets a great foundation for what the industry can do 3201 with the product and with the systems once they are built. 3202 The lot traceability as a phase-in I think absolutely also lets us know how to work with that product and the serial 3203

3204	numbers in a measured, responsible way and in a way that is
3205	practical for all of the supply chain partners.
3206	Mr. {Latta.} Thank you very much, Mr. Chairman, and my
3207	time is expired and I yield back.
3208	Mr. {Pitts.} The chair thanks the gentleman. That
3209	concludes the questions of our members. I am sure they will
3210	have additional follow-up questions, other questions, and we
3211	will send them to you. We ask that you please respond
3212	promptly.
3213	I would like to thank all of the witnesses for appearing
3214	today, two excellent panels, a lot of good information, a
3215	very important issue as we move forward, and I remind members
3216	they have 10 business days to submit questions for the
3217	record. The members should submit their questions by the
3218	close of business on Thursday, May 9th.
3219	Without objection, the subcommittee is adjourned.
3220	[Whereupon, at 12:49 p.m., the Subcommittee was
3221	adjourned.]