Regulation versus Technology / Health Care Across Borders
Presentation Outline

1. Background on the National Association of Boards of Pharmacy (NABP) and Dot Pharmacy (.pharmacy)
2. Bridges and Guardrails – Dot Pharmacy Experience
3. Global Health Care – Challenges, Trends, and Opportunities
4. Summary and Conclusions
What Is NABP?

- The National Association of Boards of Pharmacy® (NABP®) is a nonprofit, international, impartial professional organization that supports its member boards of pharmacy in protecting the public health.
- Member boards of pharmacy include the 50 US States, 4 US jurisdictions, 9 Canadian provinces, Bahamas, Australia, and New Zealand.
- NABP has been certifying online pharmacy sites since 1999.
- .Pharmacy is an evolution of this ongoing effort to create a safe online environment for pharmacy transactions and pharmacy-related product information.
Global Passports

• Highways to Nowhere
• The Internet Autobahn
Internet of Things

The Internet: from birth to the IoT era

1960s

The Internet is born

It connects computers between themselves and transmits simple messages with limited data exchange capability.

1989-2000

A first revolution

Web technologies allow the linking of documents. The www is born (Web 1.0).

Early 2000s

The Internet becomes Universal

The Internet is now a universal communication platform. It carries all voice, video, or information content, with social media enabling user-generated content (web 2.0).

Now

Internet of Things: the next step

The IoT is the next step towards digitisation where all objects and people can be interconnected through communication networks, in and across private, public and industrial spaces, and report about their status and/or about the status of the surrounding environment.
Generational Differences

<table>
<thead>
<tr>
<th></th>
<th>18-29</th>
<th>30-49</th>
<th>50-64</th>
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<tr>
<td>East/South Africa</td>
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<td>Conflict Area*</td>
<td>50</td>
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<td>45</td>
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</table>

Percent responding “very good” to “How do you feel about the world becoming more connected through greater economic trade and faster communication?”

*Countries included in the Middle East/Conflict area are Egypt, Jordan, Lebanon, Pakistan, Turkey and Uzbekistan.
## Cultural Perceptions

### Older Citizens See Culture as Superior

<table>
<thead>
<tr>
<th>Region</th>
<th>18-29</th>
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<th>50-64</th>
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<td><strong>Slovak Rep.</strong></td>
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<td><strong>Ukraine</strong></td>
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</table>

*Percent who agree “our people are not perfect, but our culture is superior.”*
Border Crossings

Electronic Health Care
(EHR patient portals; telemedicine; electronic prescribing; online pharmacy)

Shared health care outcomes

Scopes of practice - Regulations
Crossing Borders

• The Internet is the most common pipeline for counterfeit drugs entering the legitimate supply chain.

• Of 11,000 Internet drug outlets reviewed by NABP, 96% were found operating illegally.
  – 35,000 to 45,000 rogue sites
  – 20 new sites appear each day.

• Most sell unapproved drugs from unknown locations without a prescription.

• The World Health Organization (WHO) estimates between 100,000 and 1 million people die from using counterfeit drugs annually.
What is .Pharmacy?

- .Pharmacy is a Top-Level Domain (TLD) like “.com” or “.net.” Uniquely, the .pharmacy TLD is only granted to website operators that meet 10 core safety standards.

- “Seal of approval” is built into the URL

- .Pharmacy gives patients an easy way to access safe medicines and information.
URLs of Websites to Be Evaluated

Content that will appear on the requested .pharmacy domains must be evaluated by NABP. For each requested domain name listed below, please provide the URL of live or staged website where content can be evaluated.

If the pharmacy(ies) dispensing through the websites listed below ship prescription medications internationally, list all countries where they are shipping.

<table>
<thead>
<tr>
<th>.Pharmacy</th>
<th>URL of Website to Be Evaluated</th>
<th>Website Shipping Medication Internationally? List All Countries</th>
<th>Action</th>
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</thead>
<tbody>
<tr>
<td>internet</td>
<td><a href="http://www.onlinepharmacy.com">www.onlinepharmacy.com</a></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Back  Next
.Pharmacy and the FMD’s Common Logo

• The .pharmacy top-level domain provides another opportunity for NABP and EU Member States to collaborate

• Align processes and criterion with the Common Logo requirements

• Coordination to maximize the patient safety benefits of the Common Logo and .pharmacy program, prevent consumer confusion, and yield efficiencies for all involved
Current Status of .Pharmacy

- Multistate, and in some cases, multi-national entities registered at for .pharmacy domain in 2015, including CVS, Target, Rite Aid, Express Scripts, and supervalu of Great Britain.
  - 351 domain names approved
  - 238 .pharmacy domain names registered

- Global Initiative. Several countries agreed to participate in the program in 2015, including Canada, Great Britain, Ireland, Spain, Australia, and Hong Kong, with many more expressing an interest and willingness to recognize the program.
Goals of the .Pharmacy TLD Program

• Address the global concern of illegal online drug sellers distributing products that endanger patient health

• Demonstrate adherence to all applicable laws where they are located and where their patients reside

• Provide patients with a trusted legal online platform for medications and health product information across borders
Search Engines and .Pharmacy

Bing  Google

YAHOO!
Consumer Outreach

- TV – 118.5 million audience impressions
- Radio – 90.9 million impressions
- Spanish radio – 13.9 million impressions
What Lies Ahead?

**STAKEHOLDERS**
- Global, uniform solution for search engines (Google) and payers (VISA)
- Replaces seals, verification sites, and country-by-country license and accreditation review
- Risk mitigation

**CONSUMERS**
- Easily recognized as safe place (replacing seals & verification sites)
- Increased product safety (proper licensure) and data security (PHI regulation compliant)

**REGULATORS**
- Global, uniform solution
- Streamline enforcement of privacy and practice regulations

**PHARMACIES**
- Approval service ensures regulatory compliance
- Easily recognized by consumers as safe
- Potential SEO advantage
- Not “.com” Internet
Conclusions and Questions

• Success will not be measured by the number of domain names registered.
• Success will be measured by the assistance provided to patients and the level of recognition and trust shared globally.
• Thank you!