



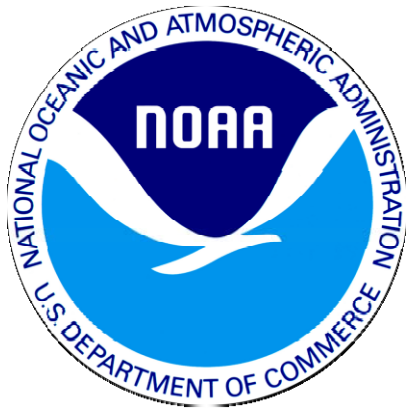
# Unleashing the Power of Open Data and Innovation to Improve Health

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**U.S. Department of Health and Human Services**  
**@todd\_park**

# The Health Data Initiative: Turning HHS and sister organizations into the “NOAA of health data”



Weather data



FUELS

Made available to the public



- Weather newscasts
- Weather websites
- Weather mobile apps
- Weather insurance
- And more



**AccuWeather.com**  
World's Weather Authority™

# HDI goal: A self-propelled, open “ecosystem of innovation” using data to improve health (and create jobs of the future)



## A Rapidly Growing Array of Innovative Products and Services That:

- Help consumers take control of their health and health care
- Help employers promote health and wellness
- Help care providers deliver better care
- Help journalists shed light
- Help local leaders make better-informed decisions
- Support all of the above through “data intermediary” services
- And much more

### Health-Related Data from



**FUELS**

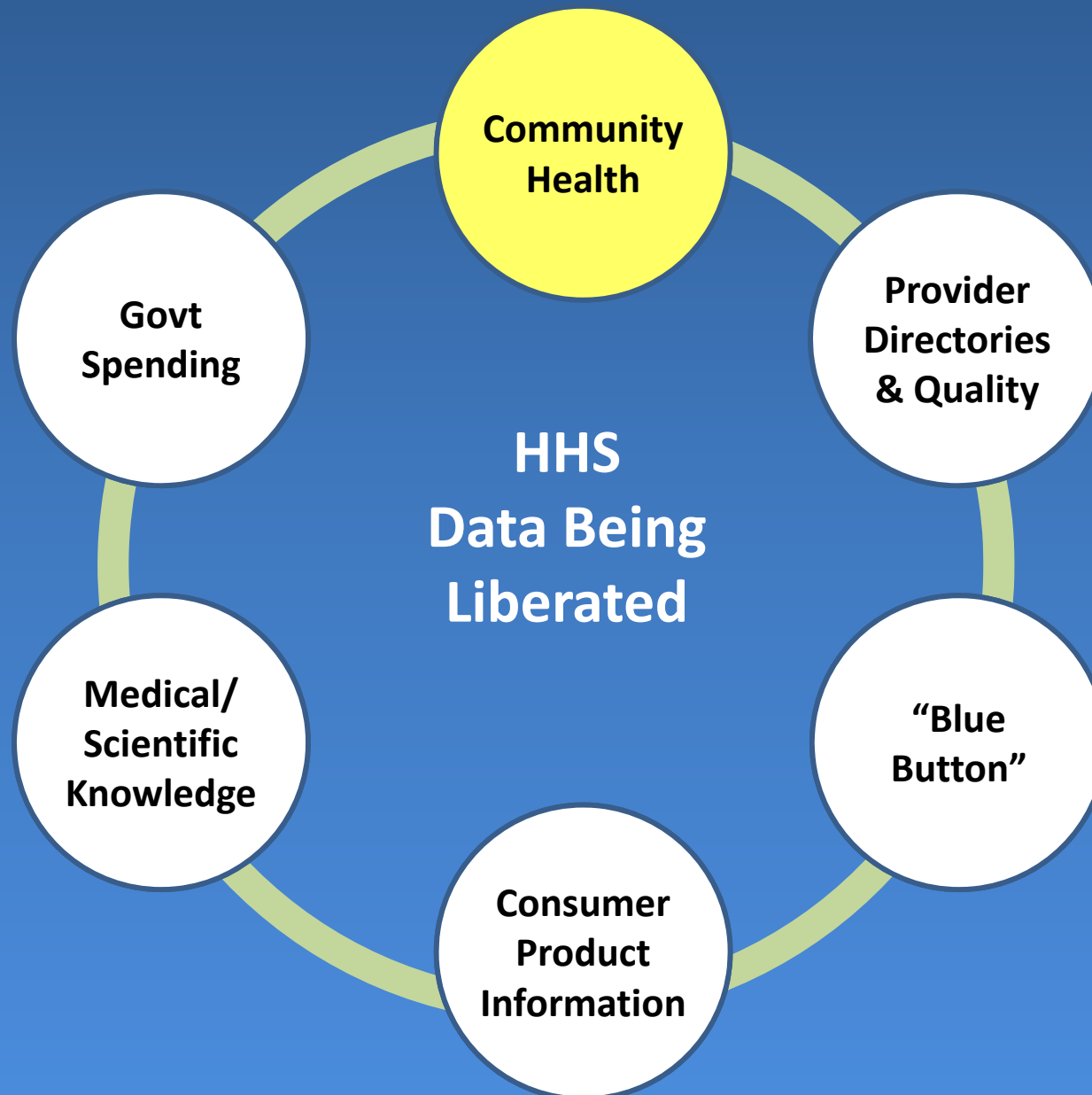




# Health Data Initiative core activities: Liberate data and catalyze innovation

- 1. Publish brand new data for public access** – while rigorously protecting privacy and confidentiality
- 2. Make existing data much more accessible** – “machine-readable,” downloadable, accessible via application programming interfaces (APIs), free, much easier to find
- 3. Energetically publicize our data to innovators** – who can use it as raw material to develop applications and services that help improve health and health care

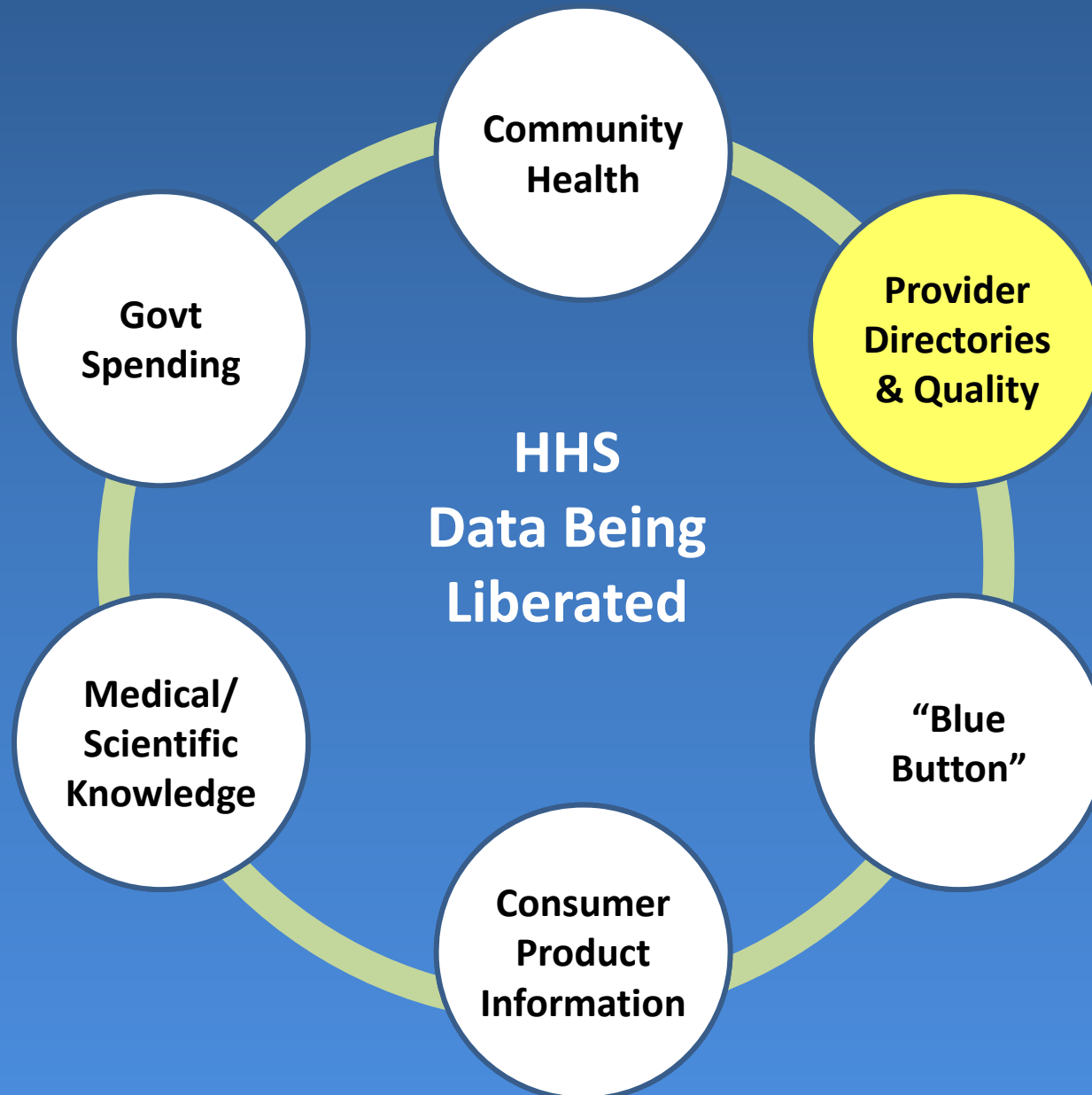
# What kinds of data are we liberating?



## Community Health Data Example:

- Health Indicators Warehouse, at [healthindicators.gov](http://healthindicators.gov)
- 1,170 metrics of community health and health care performance
- Launched 2/2011

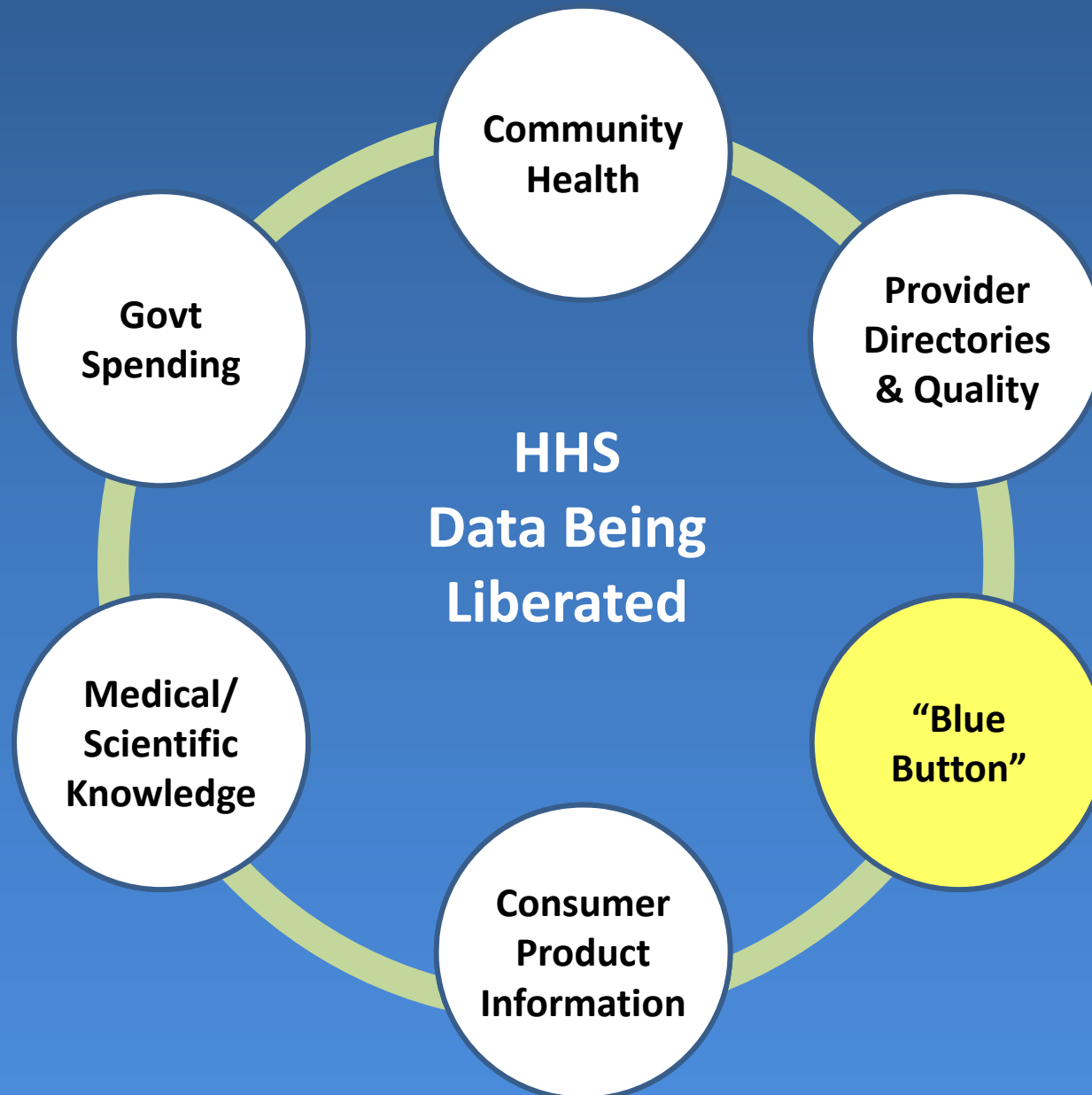
# What kinds of data are we liberating?



## Provider Directories & Quality Data Examples:

- Nationwide directories of care providers
- Provider quality COMPARE APIs at [data.medicare.gov](http://data.medicare.gov), launched 9/2010
- Medicare claim files for provider quality measurement, coming 1/2012

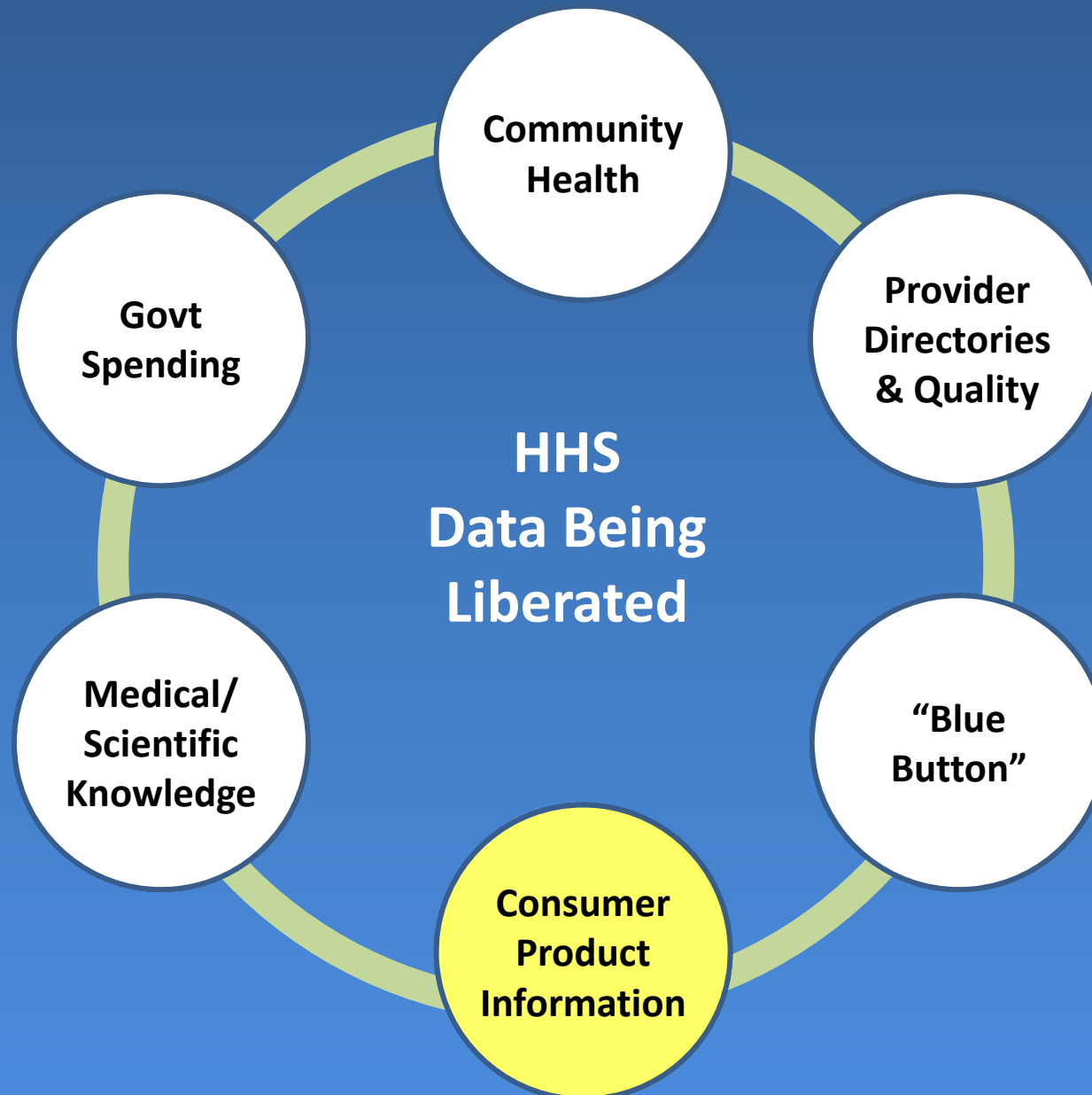
# What kinds of data are we liberating?



## **"Blue Button" Data**

- VA, HHS, DoD joint venture
- Allows veterans, Medicare beneficiaries, and active duty military to download their own claims or personal health information
- Launched 10/2010
- Learn more at [bluebuttondata.org](http://bluebuttondata.org)

# What kinds of data are we liberating?



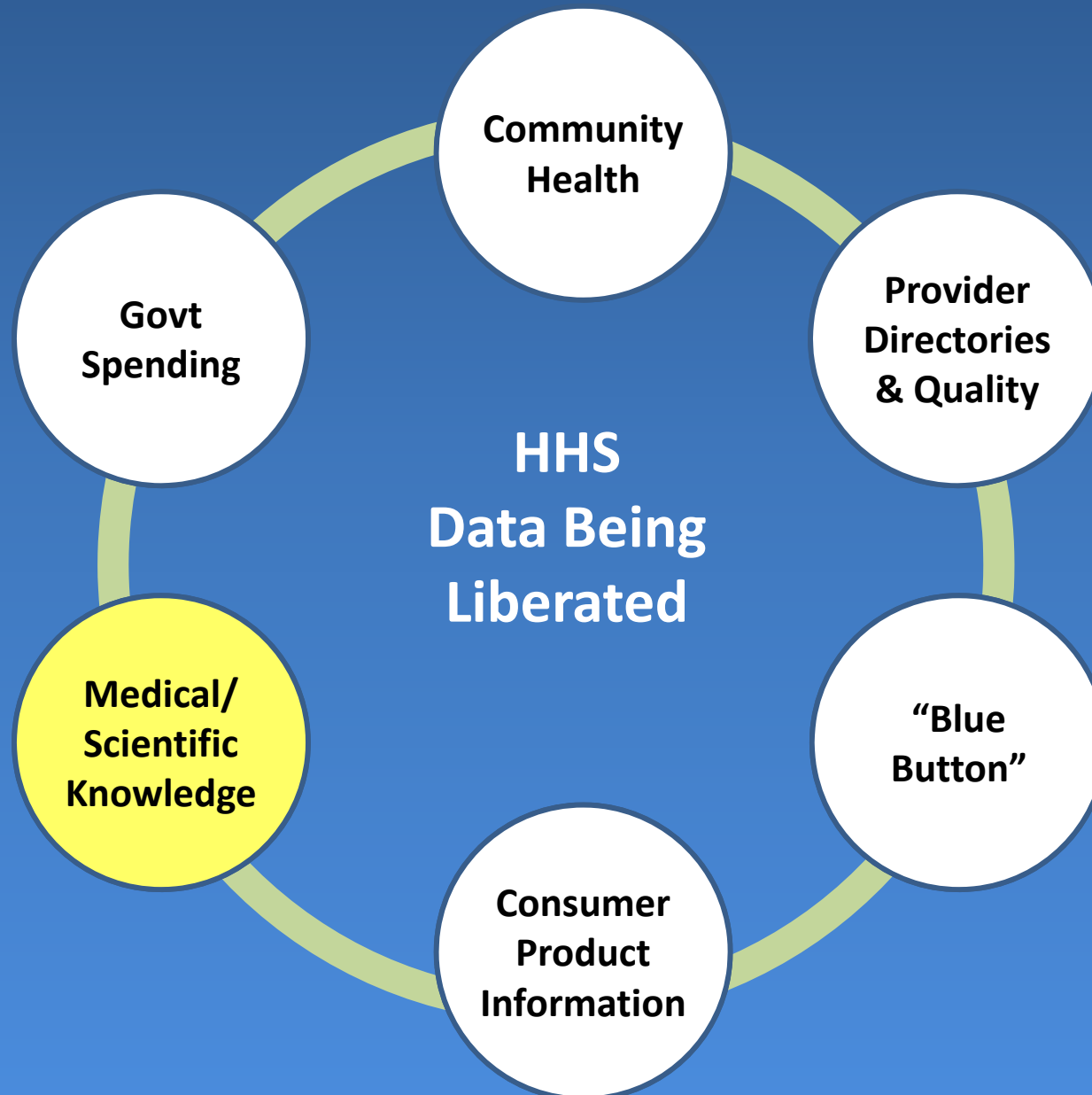
## Consumer Product Information Examples:

- FDA recall (drugs, devices, food) data in downloadable XML format – published 10/2010
- Health insurance products available in the individual and small business markets across the U.S. – made available via downloadable files 8/2011





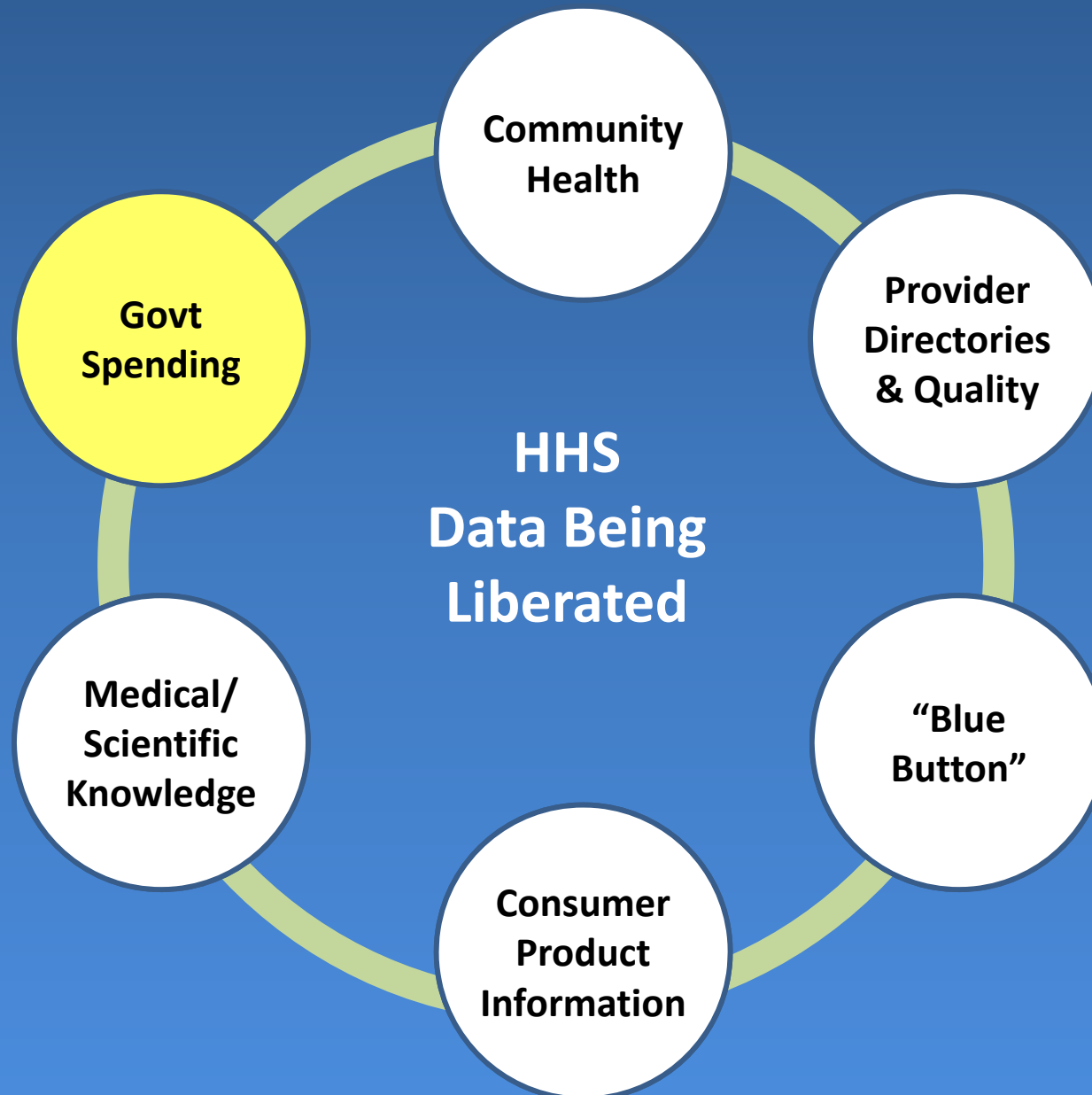
# What kinds of data are we liberating?



## Medical/Scientific Knowledge Examples:

- National Library of Medicine API Portal, deployed 9/2010, including ClinicalTrials.gov and Pillbox APIs
- Medline Plus Connect, launched 11/2010

# What kinds of data are we liberating?



## Govt Spending Data Example:

- Medicare claims “basic standalone files” – first-ever claim-level files (“slimmed” for privacy protection), available for free public download for all major types of care as of 5/2011

# HealthData.gov, the one-stop place to get free, publicly available data from federal agencies, launched 2/2011



## Welcome to the Health Data Community

You've found a public resource designed to bring together high-value datasets, tools, and applications using data about health and health care to support your need for better knowledge and to help you to solve problems. These datasets and tools have been gathered from agencies across the Federal government with the goal of improving health for all Americans. Check back frequently because the site will be updated as more datasets and tools become available.

[More Information](#)

## Special Features

### Health Data Initiative Forum

[VIEW MORE](#)



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- [Apps Expo](#)
- [Other Data Sites](#)
- [Blogs](#)
- [Forums](#)

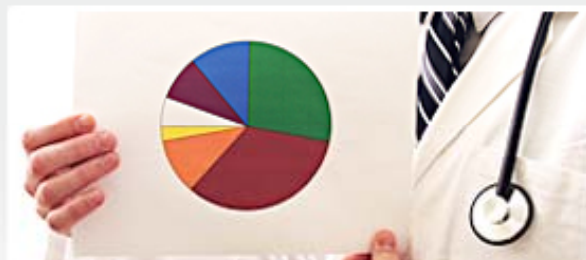
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[Data.gov](#) » [All Communities](#)

## Recent Blog Post



## What's New



## Challenges



# Publicizing our data to innovators across America

- Challenges and “code-a-thons” (Health2Challenge.org, Challenge.gov)
- Many innovator “meetups” and conferences
- Annual “health datapaloozas”



[About](#)
[Online Challenges](#)
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## ONLINE CHALLENGES

Healthcare has big challenges. And technology might not solve them all. But we believe in progress one app at a time. Have a technical problem that needs working out? An app you wish existed? Data that's sitting on the shelves getting dusty that could be made more useful? You will be amazed by what's possible. Read the [FAQs here](#).

[Submit a challenge](#) | [Sponsor a challenge](#)

## LIVE CHALLENGES

Want to connect, collaborate and build real-time? That's what the [Code-a-thon](#). Whether you're a developer, a designer, researcher, a physician or a patient – your important viewpoint that we'd love to share and be a part of the project. **Check back soon to learn more about our 2011 schedule.**



Amanda

Want to sponsor a Code-a-thon? [Learn more](#)



# The June 9, 2011 Health Data Initiative Forum

- 2<sup>nd</sup> annual “health datapalooza” -- sponsored by the Institute of Medicine and HHS
- Showcased 50 of the best innovations developed by companies that help consumers, care providers, employers, and communities improve health and health care
- Featured major announcements by nearly 20 additional companies and other organizations



# Examples: Helping consumers take control of their health and health care

- iTriage
- Healthline
- Vitals.com
- Patients Like Me
- Asthmapolis
- Food Oasis



**Healthline**  
Connect to Better Health

total knee replacement

Symptom Search | Treatment Search | Doctor Search | Drug Search


Home | Health A to Z | Healthy Living | Check Your Symptoms

Your Search: **total knee replacement** Showing 1 to 10 of 230

[total knee replacement](#)  
Call Today For An Appointment & Get Help w/Your Orthopedic Needs!  
[www.WebsterOrtho.com](http://www.WebsterOrtho.com)


[Do You Have Knee Pain?](#)  
Top 5 Knee Pain Signs. What The Doctor Is Not Telling You.  
[Blog-Med.com](#)

**Learn more about Total Knee Replacement**

 **Total Knee Replacement** is a treatment for Osteoarthritis, Rheumatoid Arthritis, **Knee Pain**, and Osteoarthritis of **Knee**. **Knee replacement** is a procedure in which the surgeon removes the damaged or diseased **knee joint** and replaces it with a new artificial joint...

[Procedure Overview](#)    [Questions to Ask Your Surgeon](#)    [Estimate Procedure Costs](#)  
[Evaluate Your Knee Pain](#)    [Preoperative Evaluation](#)    [Compare Local Hospitals](#)  
[Types of Knee Implants](#)    [Risks and Complications](#)

**Explore the Knee**

 Explore the knee and related anatomy in 3D with Healthline's Body Maps. Rotate, look inside and learn about it how.  
[Explore the Knee in 3D](#)

**ASTHMAPOLIS** Weekly report January 24-31, 2011

**This week**  
We expect poor air quality in Madison. Keep an eye on the weather.

**Uncontrolled**  
Based on your frequent nighttime symptoms.

**Tip for you**  
Talk with your physician about changing the timing of your evening dose.

**Daily controller medication**  
Last week: 55%  
This month: 45%




**January 2011**

Sp	Mo	Tu	We	Th	Fr	Sa	Su
1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	

**Your asthma this week**

Asthma symptoms	You	Community
Cough	25%	15%
Wheezes	20%	10%

Asthma triggers	You	Community
Air pollution	30%	20%
Tobacco smoke	30%	15%

# Examples: Helping doctors and hospitals deliver better care

- Aetna
- Essence Group/Lumeris
- Doximity
- Press Ganey
- Rise Health
- ElizaLIVE



# Examples: Helping communities improve health

- Ozioma
- ESRI
- Network of Care for Healthy Communities
- Palantir/CDC



Sonoma County Network of Care™ for Healthy Communities

Community Dashboard Promising Practices Service Directory Library Links Legislate My Folder

### Healthy People 2010 : Progress Tracker

Healthy People provides a framework for prevention for communities in the U.S. Healthy People 2010 is a comprehensive set of key disease prevention and health promotion objectives. The health objectives and targets allow communities to assess their health status and build an agenda for community health improvement.

Sonoma County is interested in tracking its health progress using these key health indicators. The indicators presented below show how Sonoma County is measuring up to the Healthy People 2010 national health targets.

**Tracker for Sonoma County** [View the Legend](#)

2010 Targets	Current and Target	Data	Since Prior Period	Status
<b>Access to Quality Health Services</b>				
<a href="#">Children with Health Insurance</a>	Current: 88.5 percent Target: 100 percent	88.5 / 100	↓	TARGET NOT MET
<a href="#">People with a Usual Source of Health Care</a>	Current: 93.4 percent Target: 85 percent	93.4 / 85	↑	TARGET MET
<b>Cancer</b>				

Health  
Economy  
Education  
Government & Politics  
Natural Environment  
Public Safety  
Social Environment





## Selected announcements at the Forum

- EPA “Apps for the Environment” challenge
- Walgreens 2.0 + challenge
- Aetna Foundation challenge
- Sanofi Aventis diabetes challenge
- NCIIA Nursing Home of the Future “invent-a-thon”
- University of Michigan: nation’s first consumer health informatics master’s degree program
- Startup Health: new health startup “seed accelerator/entrepreneurship academy”
- New “Health Data Consortium”



# Founding members of the Health Data Consortium



- **AcademyHealth**
- **California HealthCare Foundation**
- **Consumers Union**
- **ESRI**
- **Gallup-Healthways Well-Being Index**
- **Grantmakers in Health**
- **Health 2.0**
- **InnoCentive**
- **Institute of Medicine**
- **Lucile Packard Foundation for Children's Health**
- **Mayo Clinic Center for Innovation**
- **National Association of Counties**
- **O'Reilly Media**
- **Robert Wood Johnson Foundation**
- **U.S. Department of Health and Human Services**



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