

ARUP[®] LABORATORIES



UNIVERSITY OF UTAH
SCHOOL OF MEDICINE

| Department of Pathology

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Speaker Information



Dr. Jackson directs the Informatics Department at ARUP, including the e-business and Medical Content teams.

ACOs and the Clinical Laboratory:

Where to Begin?

Learning Objectives

1. Understand how ACOs could view diagnostic processes differently than traditional fee-for-service providers.
2. Understand the potential impact of bundling outpatient lab payments.
3. Envision potential roles for laboratories within ACOs

ACOs and the Laboratory

- Key Questions
 - What do we know about ACOs?
 - What don't we know?
 - How might diagnostics be managed within an ACO?
 - How can laboratories position themselves in an ACO environment?

ACO Definition

- “...type of payment and delivery reform model that seeks to tie provider reimbursements to quality metrics and reductions in the total cost of care for an assigned population of patients.”
 - Wikipedia

What Do We Know About ACOs?

1. Healthcare costs are way too high and getting higher
2. Most people think that we need to tie payment to value.
3. Not much else.

If so much is unknown,

- Can't we just wait and see?
- How would we get started anyway?

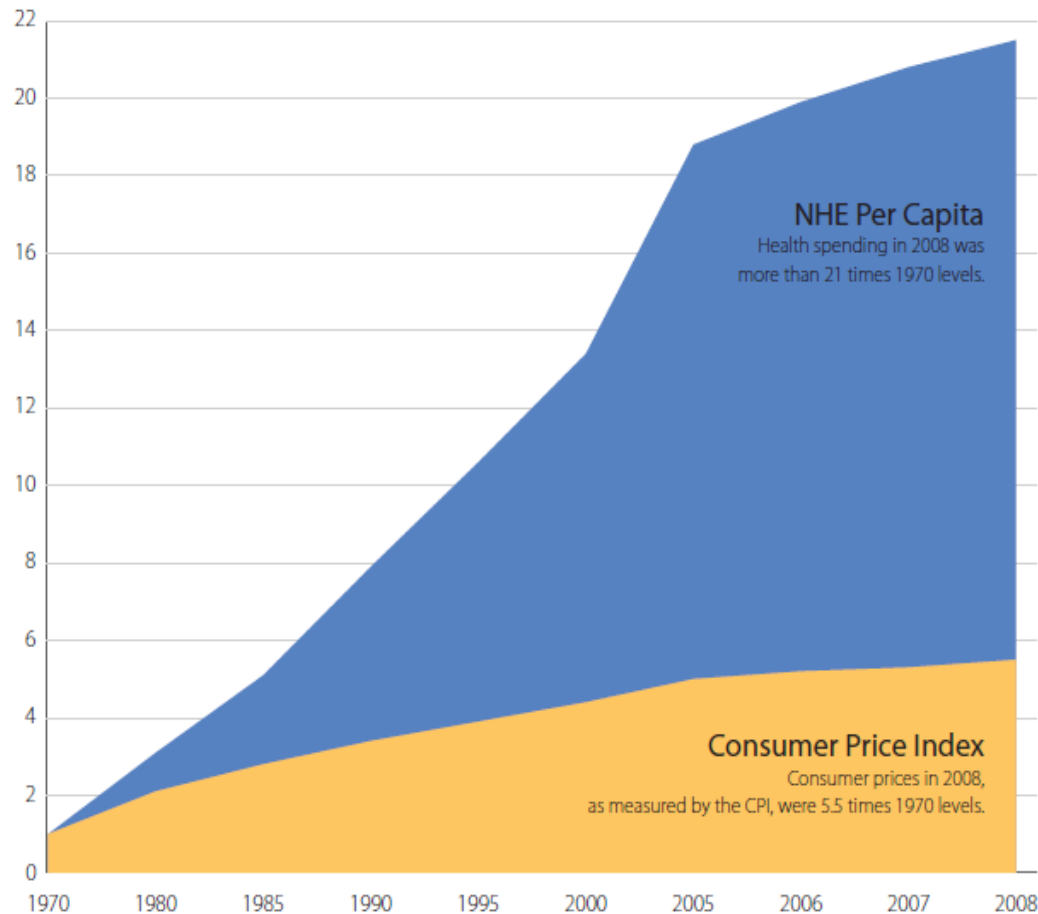
- Can't we just wait and see?
 - Sure, if you want to risk becoming obsolete.
- How would we get started anyway?
 - Identify the key strategic themes
 - Reinvent your laboratory

Healthcare Payment Models

	Complexity	Type of Delivery System	Impact on Utilization
Fee for Service	Medium	Any	Promotes excessive/wasteful care
Episode-based (e.g. DRG)	Very High	Highly integrated only	Promotes appropriate care
Capitation	Low	Highly integrated only	Promotes skimping on care

Cumulative Impact of Growth Rates, 1970–2008*

TIMES MORE EXPENSIVE THAN IN 1970



*Selected rather than continuous years of data shown prior to 2005.

Sources: Centers for Medicare and Medicaid Services (CMS), Office of the Actuary; Bureau of Labor Statistics (CPI-U, U.S. city average, annual figures).

What if Lab Reimbursement Dropped to Zero?

Activity-Based Costing in Health Care

- “How to Solve the Cost Crisis in Health Care”
 - Robert Kaplan and Michael Porter, Harvard Business Review, Sept 2011
 - Interview and blog comments available on www.hbr.org
- Current model: Department-based costing
 - E.g. total annual lab cost
- Future model: Condition-based costing
 - E.g. average lab cost per CABG

How Might an ACO handle Dx?

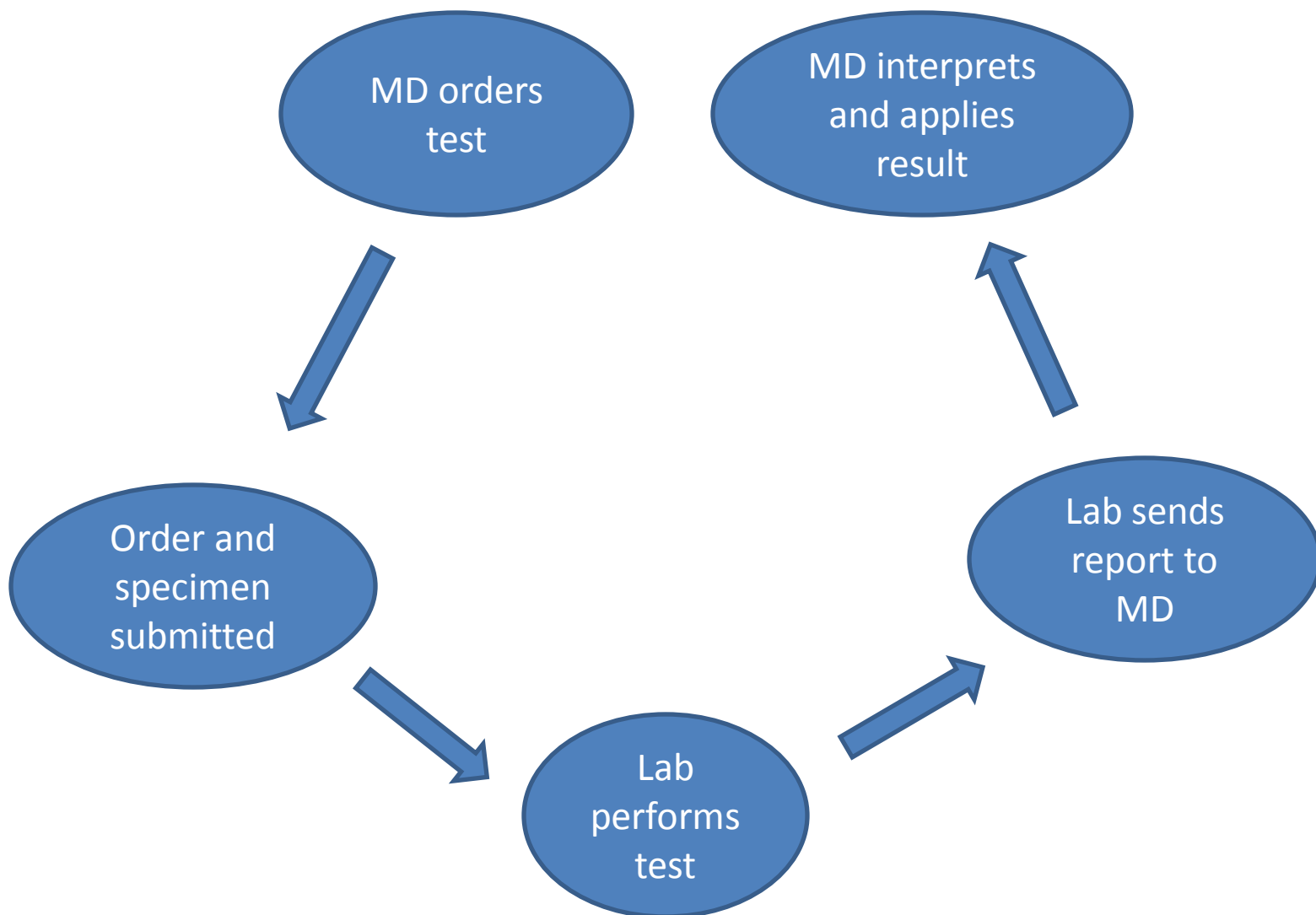
- Lab payments bundled together with other clinical costs as an episode-based payment
- Incentive for hospital/clinic to optimize use of Dx
- Active utilization management
 - **By whom?**

Clinical Value {
Accurate Dx & mgmt
Minimize total cost of care

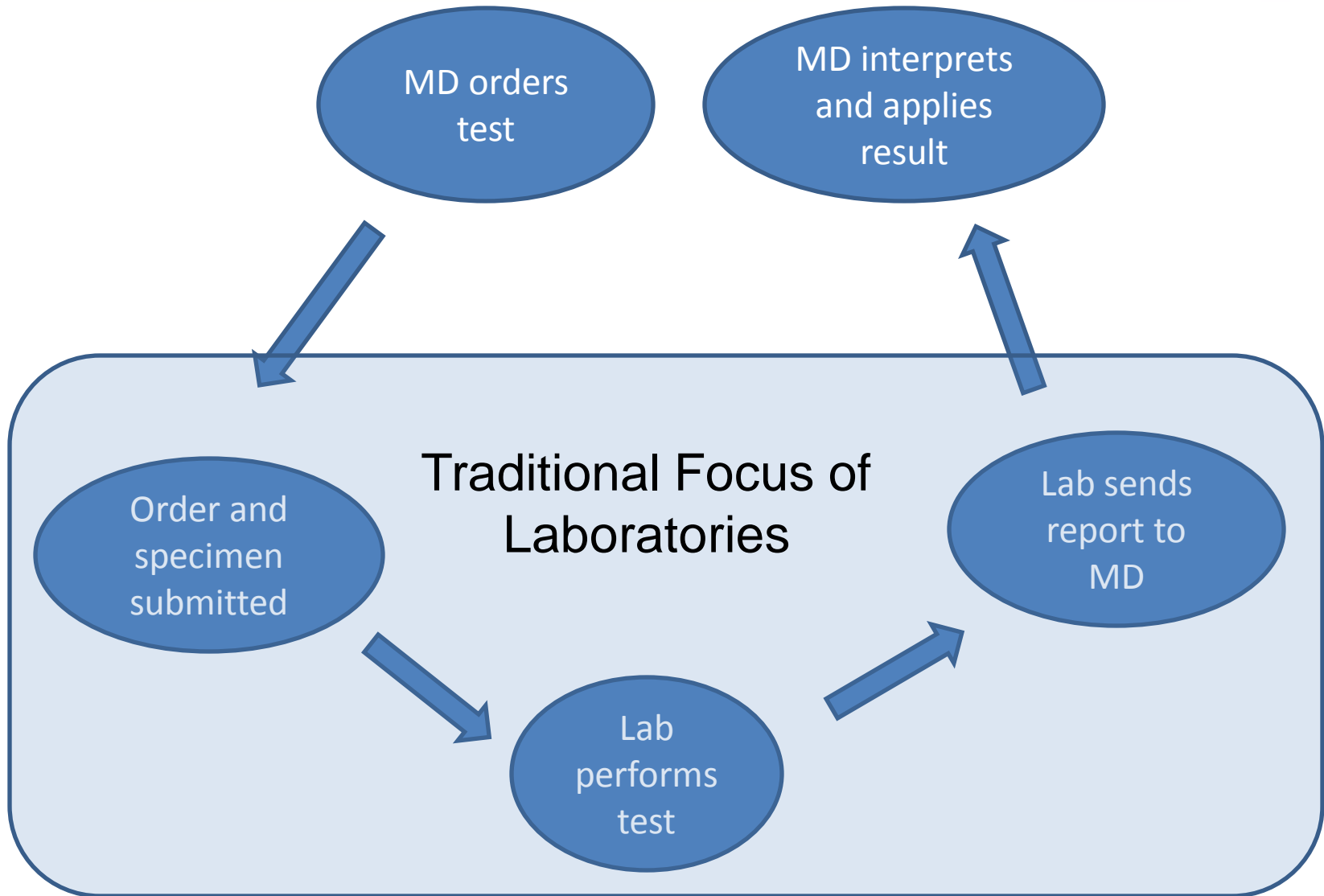
Lab Strategies to Create Clinical Value

- “But we’re already creating clinical value!”
 - How we can and need to do better
- Lessons from other disciplines
 - Bookselling
 - Digital music
 - Pharmacy
- Bringing it all together
 - Clinical leadership
 - Analytics
 - Decision support

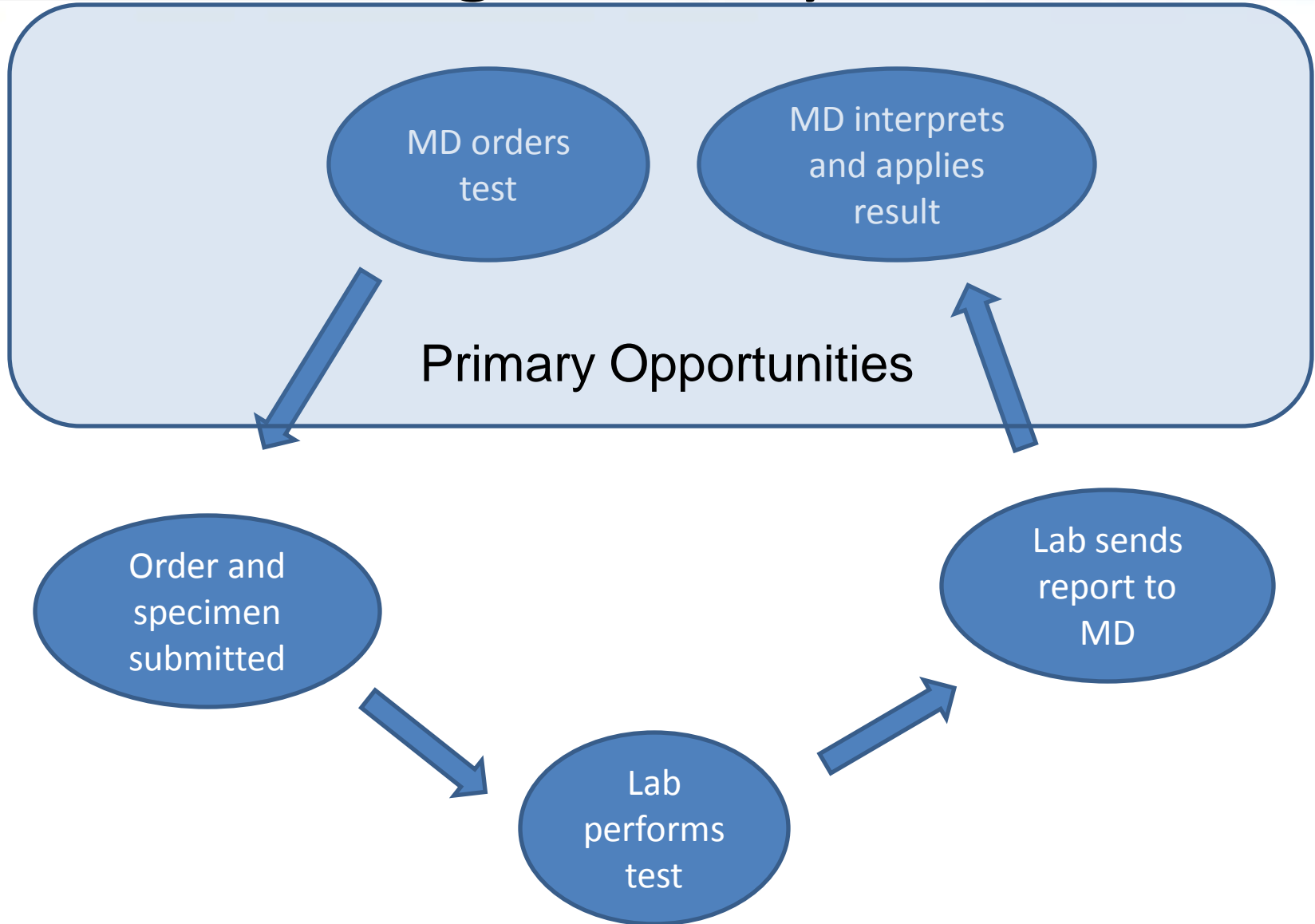
Diagnostic Cycle



Diagnostic Cycle



Diagnostic Cycle



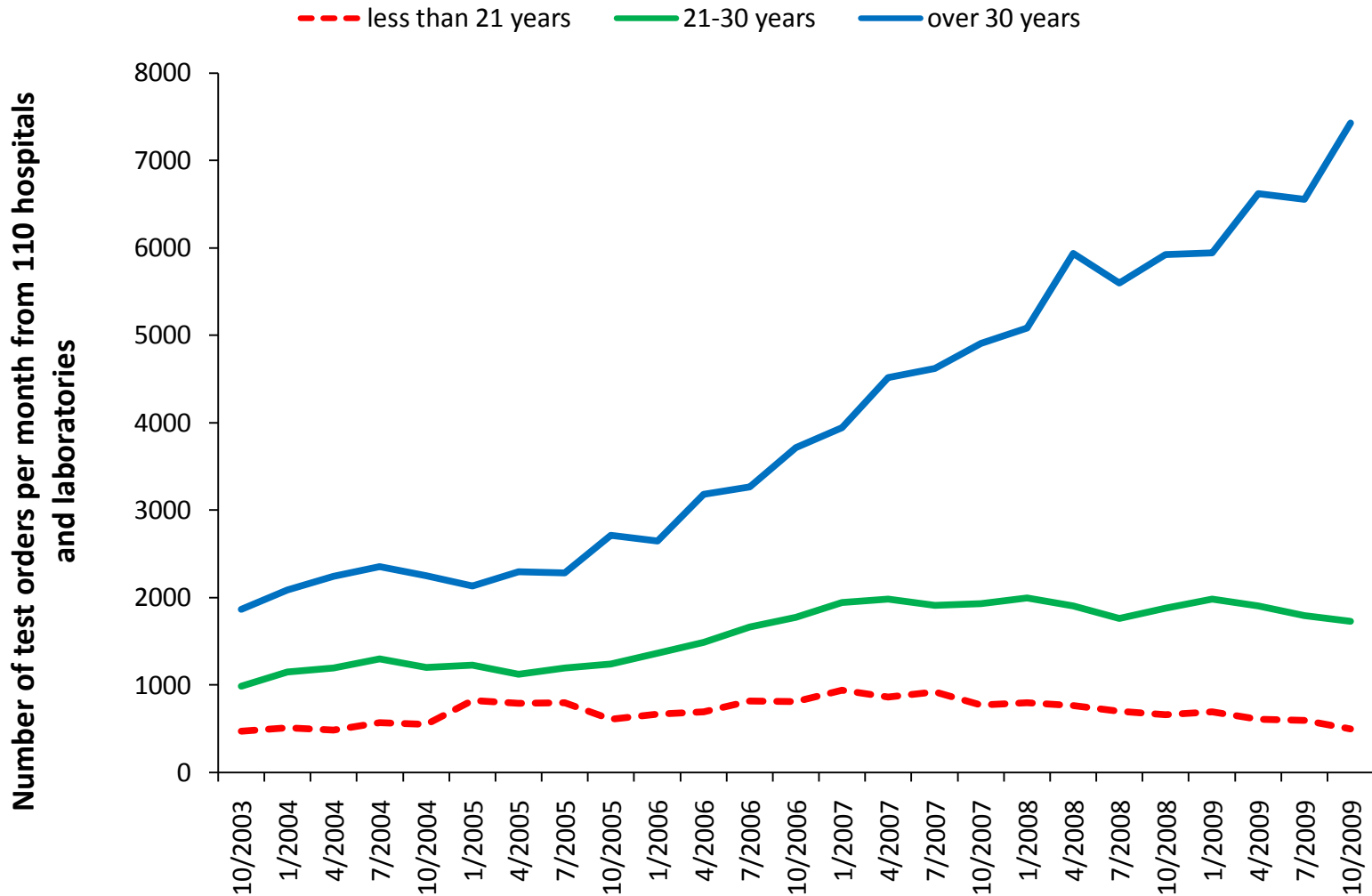
How Effectively do Doctors Use Laboratory Tests?

HPV as a prototypical example

HPV Guideline from ASCCP

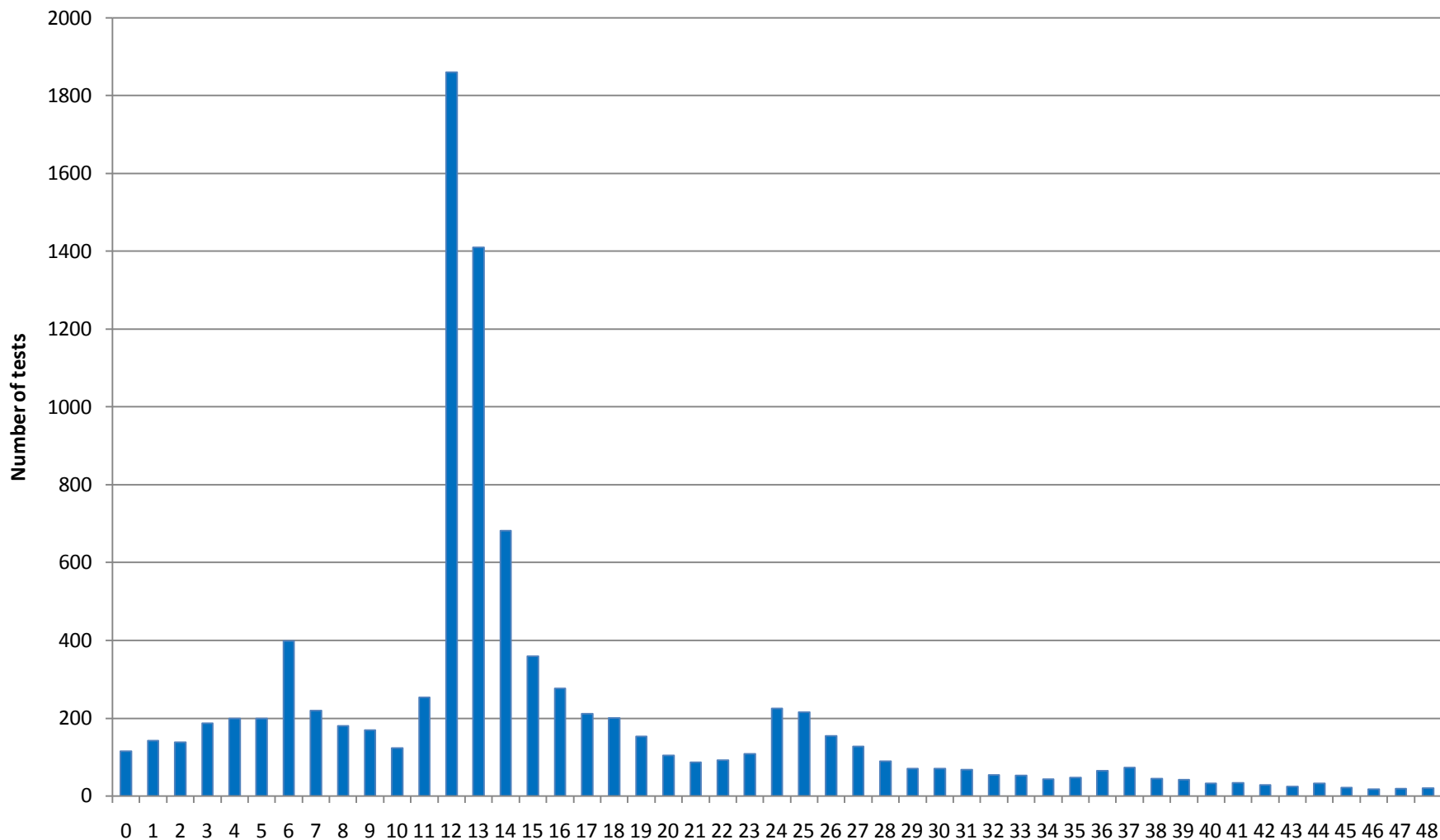
- Women under 21
 - HPV testing is contraindicated
- Women 21 to 30
 - HPV testing should not be used in primary screening
 - HPV testing may be used for evaluating certain cervical lesions (ASC-US)
- Women over 30
 - HPV testing may be used for evaluating cervical lesions and for screening
 - If HPV and cytology negative only screen every 3 years

HPV Order Volumes by Age (National sample)



Source: Shirts and Jackson, J Pathology Informatics

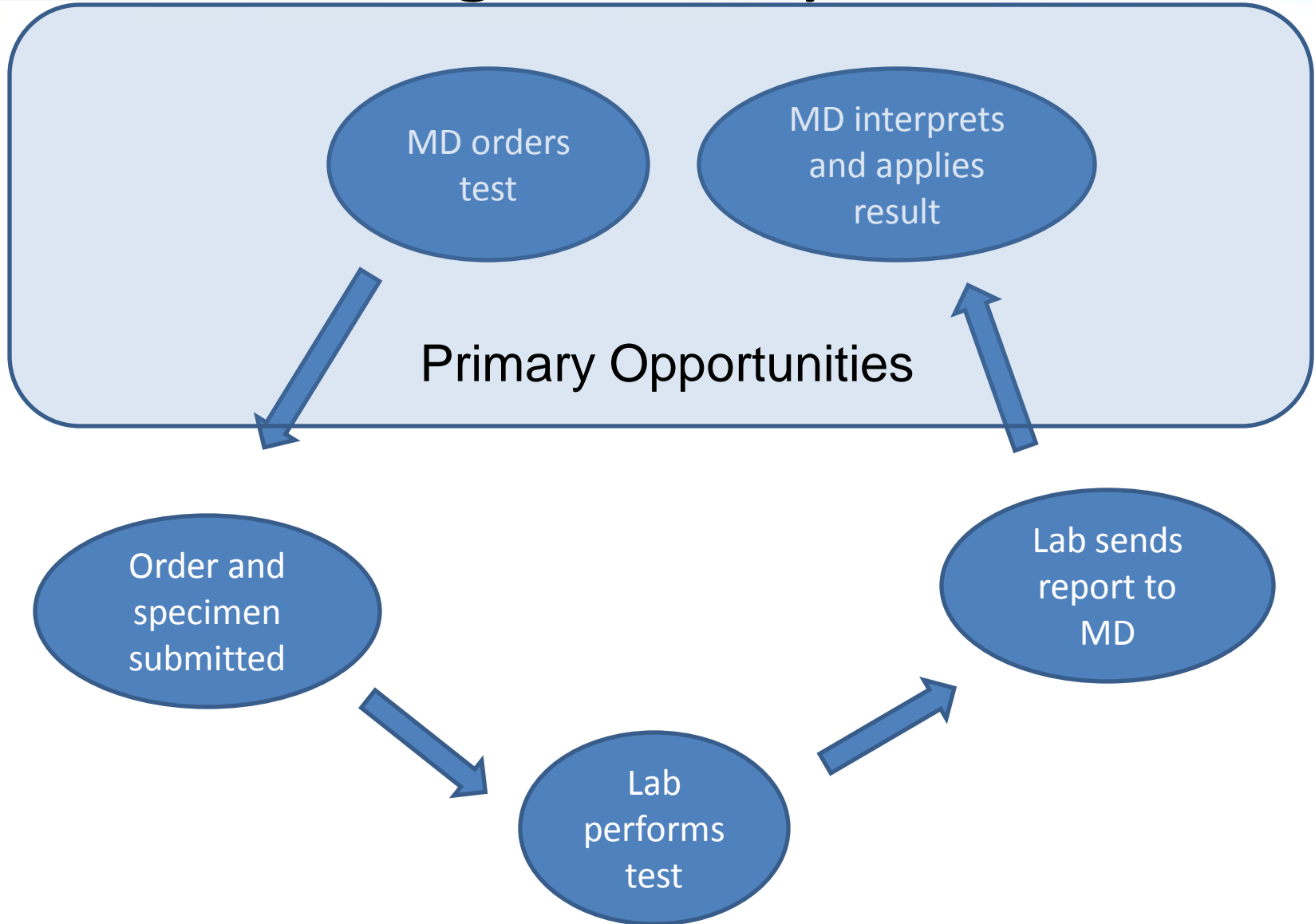
Time to Repeat HPV Test following Negative Test



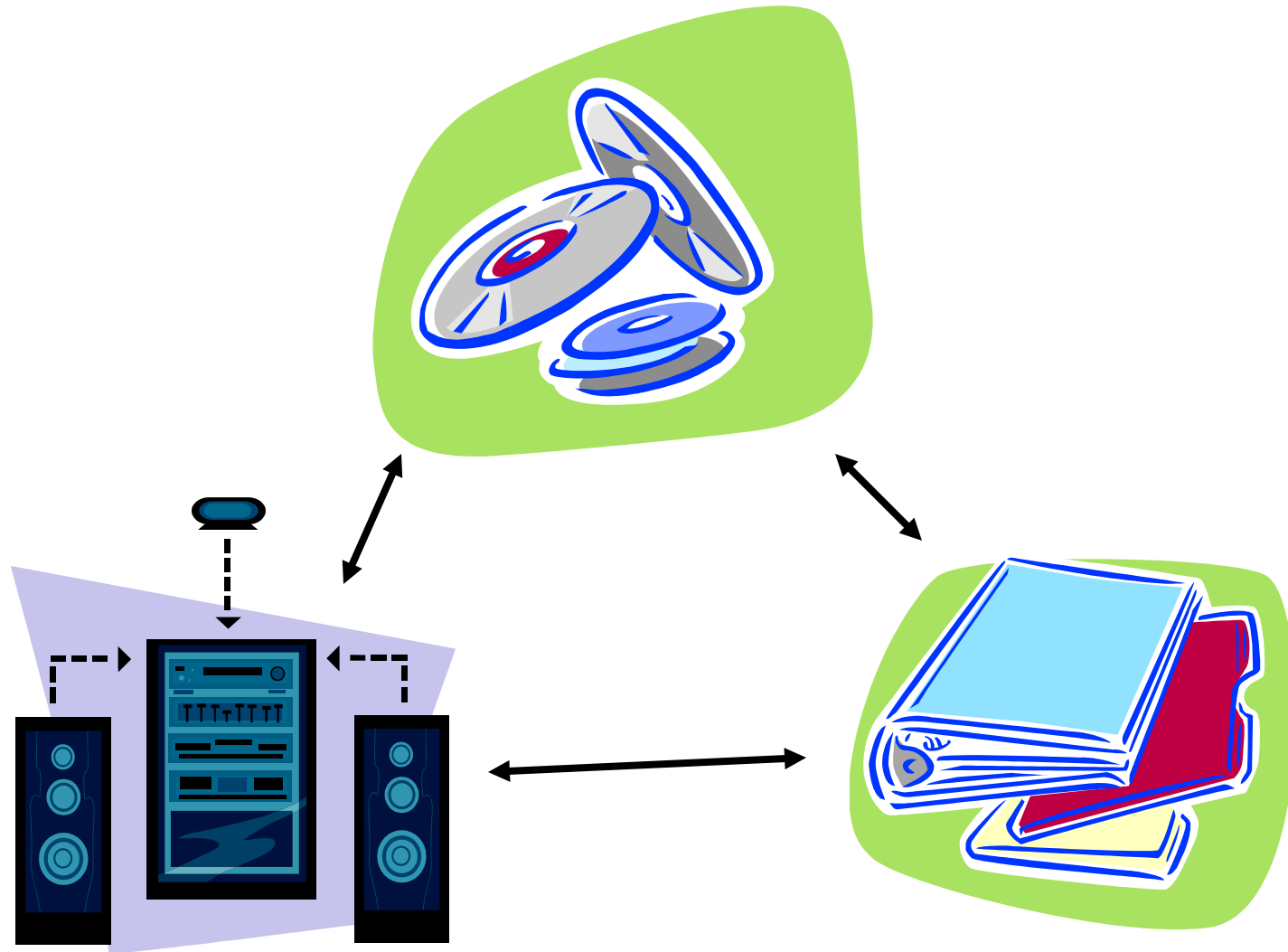
HPV, Back-of-Envelope Modeling

Strategy	Annual Cost (Rough estimate)
Annual Pap alone	\$150/year
Annual Pap w/HPV	\$250/year
Pap w/HPV, 3-year intervals	\$83/year

Diagnostic Cycle



Example: Music Retailing



Music Retailing Today

The screenshot displays the iTunes application window. At the top, the menu bar includes File, Edit, View, Controls, Store, Advanced, and Help. The main window features a playback control bar with buttons for play/pause, stop, and next, along with a volume slider and a search bar. The central area is a music library table with columns for Name, Time, Artist, Album, and Genre. The selected track is 'Appalachian Spring, concert suite' by Aaron Copland, with a duration of 25:03. The left sidebar contains sections for LIBRARY (Music, Movies, TV Shows, Podcasts, Radio), STORE (iTunes Store, Downloads), and PLAYLISTS (Party Shuffle, Genius, 90's Music, Classical, Country, Music Videos, My Top Rated, pop/rock/cntry/sndt, Recently Added, Recently Played, Rock/Pop, Rock/Pop/Country, Top 25 Most Played, florida trip, Vegas trip). The right sidebar, titled 'Genius Sidebar', shows 'Aaron Copland' as the selected artist, with 'Also By This Artist' recommendations including 'A Copland Cel...' and 'Copland: Appal...'. The bottom status bar indicates '698 songs, 2.4 days, 3.17 GB' and includes buttons for 'Burn Disc' and other functions.

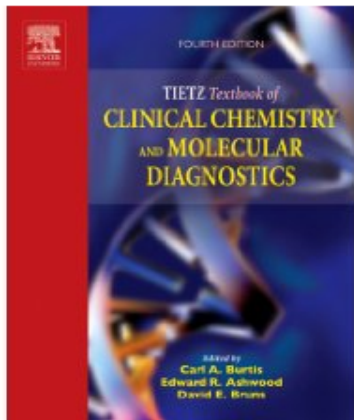
Name	Time	Artist	Album	Genre
Jacta Cogitatum Tuum. Gradual (...)	3:34	Benedictine Monks of...	Chant	Classica
Verbum Caro Factum Est. Respon...	4:05	Benedictine Monks of...	Chant	Classica
Genuit Puerpera Regem. Antiphon...	2:57	Benedictine Monks of...	Chant	Classica
Occuli Omnium. Gradual (Modo VII)	3:22	Benedictine Monks of...	Chant	Classica
Ave Mundi Spes Maria. Sequenza ...	4:19	Benedictine Monks of...	Chant	Classica
Kyrie Fons Bonitatis. Trope (Modo...	4:00	Benedictine Monks of...	Chant	Classica
Veni Sancte Spiritus. Sequenza (M...	2:42	Benedictine Monks of...	Chant	Classica
Hosanna Filio David. Antiphonal (...)	0:42	Benedictine Monks of...	Chant	Classica
Appalachian Spring, concert suite	25:03	Aaron Copland	Copland: Appalac...	Classica
Billy the Kid... orchestral suite from	3:19	Aaron Copland	Copland: Appalachia...	Classica

Example: Book Retailing

Amazon.com: Tietz Textbook of Clinical Chemistry and Molecular Diagnostics (TIETZ TEXTBOOK OF C - Windows Internet Explorer

http://www.amazon.com/Textbook-Chemistry-Molecular-Diagnostics-CHEMISTRY/dp/0721601898/ref=sr_1_4?ie=UTF8&s: wikipedia compact disk

Microsoft Outlook Web Access Amazon.com: Tietz Textb...



Tietz Textbook of Clinical Chemistry and Molecular Diagnostics (TIETZ TEXTBOOK OF CLINICAL CHEMISTRY (BURTIS)) (Hardcover)

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Pharmacy

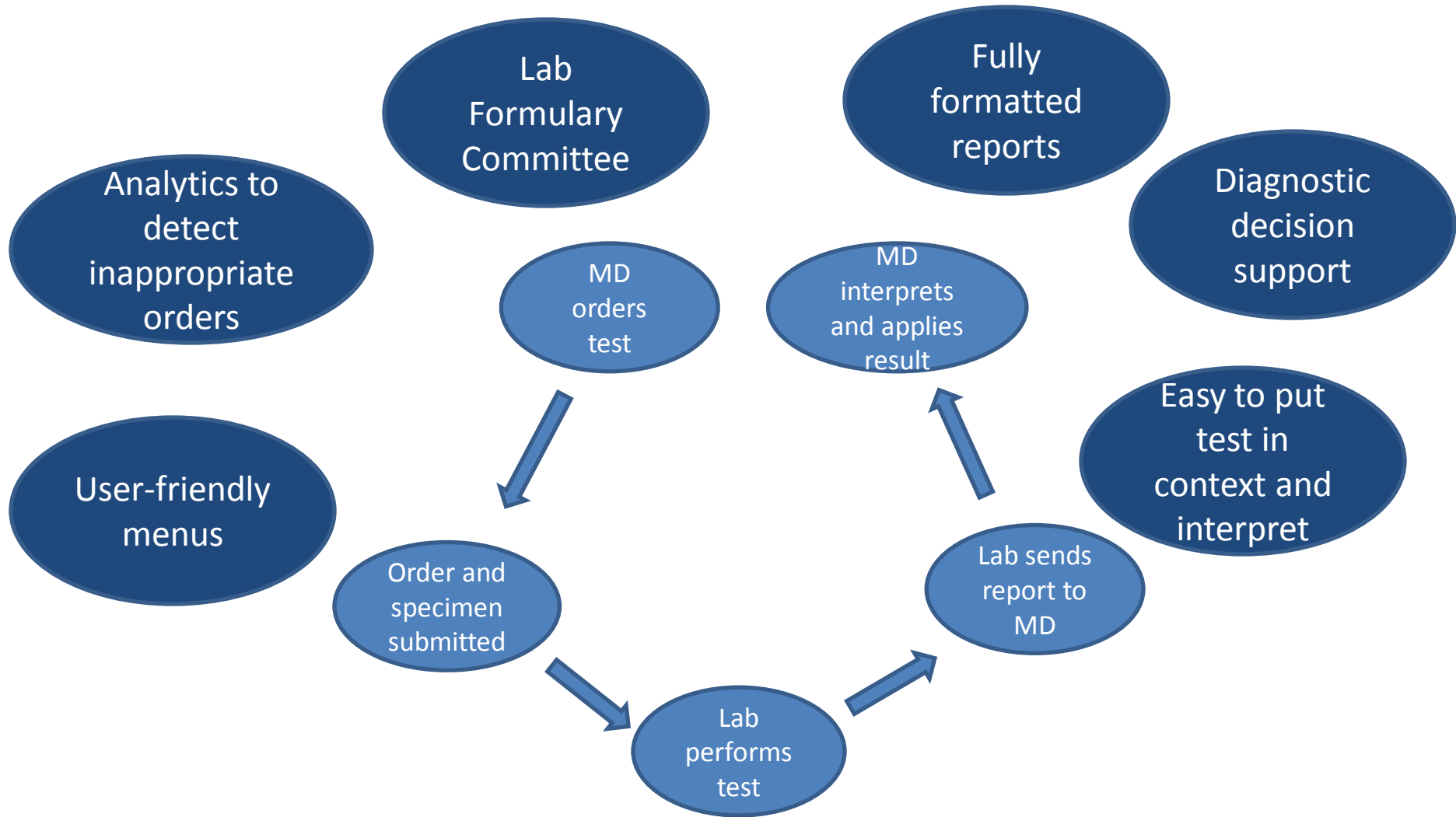
1980's

- Factory mindset
- Receive orders, process and distribute meds

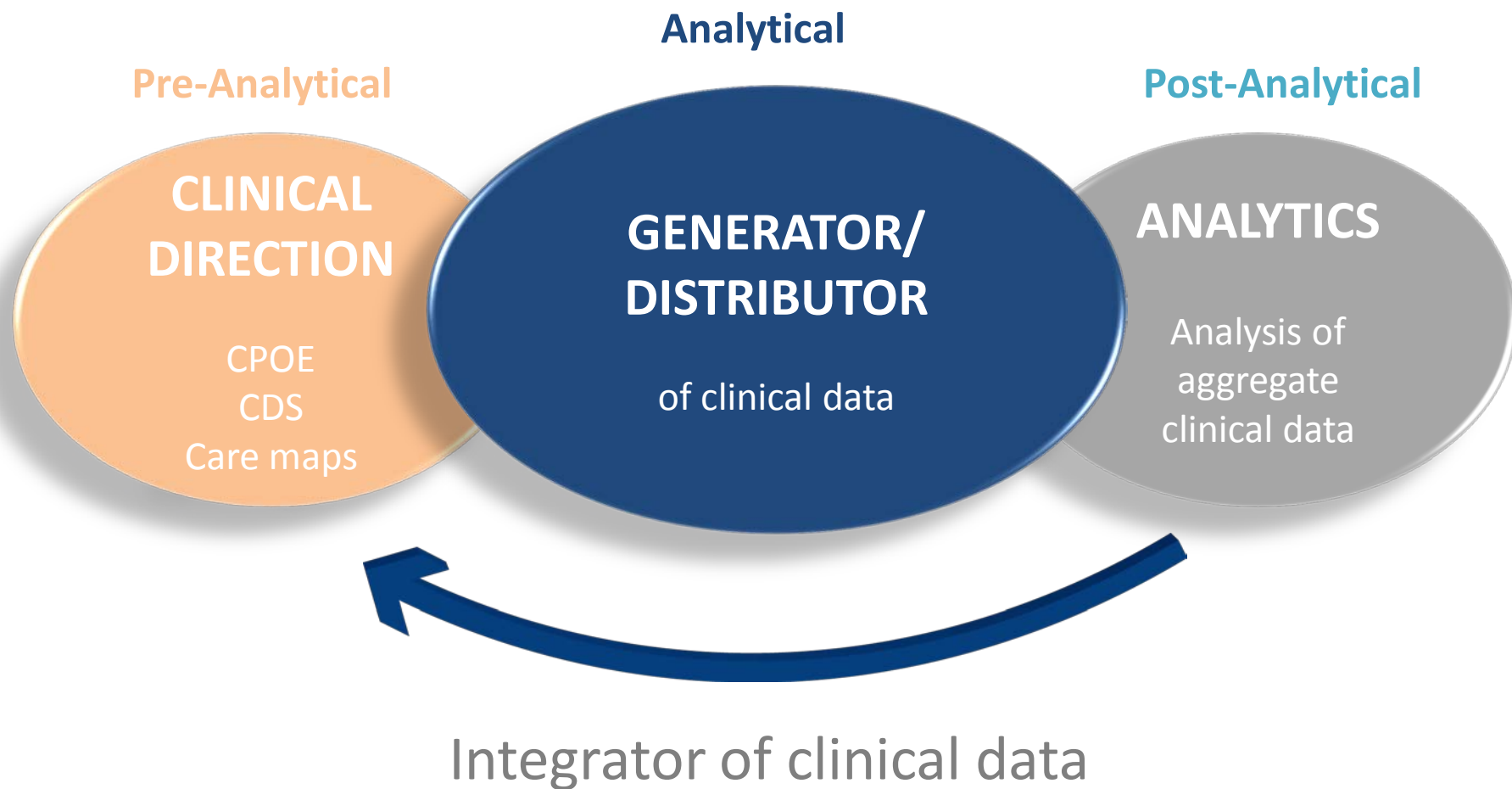
2000's and beyond

- Professional mindset
- Active clinical role
- Oversee formularies
- Optimize individual med management
- Educate clinicians

Diagnostic Cycle



Feedback Loop



How Labs Can Add Clinical Value

- Clinical leadership
- Analytics
- Decision support

Clinical Leadership

- “Laboratory Formulary” Committees
- Visible Clinical Pathologists

Audience response question

- How would you describe the relationships between your pathologists and your local physicians?
- The pathologists have little to any interaction with clinicians
- The pathologists interact occasionally with clinicians, e.g. answering questions and going to tumor boards
- The pathologists engage clinicians proactively to promote effective use of the laboratory.

Analytics

- Need to understand your doctors' ordering practices
- Compare to:
 - Peers
 - National/local guidelines

Decision Support

- Doctors have questions about lab tests.
- Are we making it easy for them to get the answers?

Summary

- In an ACO world,
 - Clinical Value = Best Dx at Low \$
 - Become clinical enterprise, not order-filling factory
 - Need to organize lab by medical condition, not by technology
 - Need to integrate across the end user (physician) experience

Questions



Question #1

- “I believe the primary cause of too much care is fear of lawsuits. Can you comment?”

Question #2

- “ACO seems to affect hospital labs, but what about reference labs who are remoted from ordering physicians?”

Question #3

- “How are national labs responding to the ACO ideas where payments would be made to the hospital and then distributed to independent labs?”

Question #4

- “Do we have examples of ACO’s already in existence? It would seem that there are already examples of them today (group Health as an example). What have we learned already from these institutions?”

Question #5

- “Am I correct in my understanding that the lab will be directing the physicians? If so, is it realistic that physicians are going to be open to taking direction from the lab?”