Healthcare and Vaccine Wars in the 21st Century: Access, Money, Politics, Cognitive Biases, and Other Survival Lessons

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Will you agree to hear a discerning, *but critical* voice, on the issue of access to health care of adults from a physician-scientist who has practiced medicine for 36 years – *even if it is different than yours*?
Starting Theses

• Access to *appropriate* healthcare remains a critical issue in the most developed and richest nation in the history of mankind

• We are involved in a great cultural war over these issues – symptomatic of many broader issues within our society

• Many political efforts from within and outside the healing professions have significantly harmed the public health

• We must address these issues – the tools for this are innovation and transformative thinking – with the metanarrative of the servant-leader
What is a Servant-Leader?

The servant-leader is servant first. The best test is this: do those served grow as persons: do they, while being served, become healthier, wiser, freer, more autonomous, more likely themselves to become servants?

And, what is the effect on the least privileged in society; will they benefit, or, at least, not be further deprived?

(Greenleaf, 1977/2002, p. 27)
“The main thing is to keep the main thing, the main thing.”
“OK, but what’s the main thing?”
Healthy Living

• Eat right – normal weight
• Exercise regularly
• Adequate sleep and rest
• Vaccines
• Don’t smoke, minimize alcohol, no drugs
• Monogamous healthy marriage
• Screen BP, lipids, glucose, Vit D, HCV, HIV, HBV, depression
• Pap, colonoscopy, mammogram, bone density, PSA
• Floss
• Get a pet
Current State – The Seven P’s

- Providers uninformed about vaccines/services
- Public health disconnected from demographics, patients and delivery of vaccines/services
- Payers with a short-term focus
- Public that is suspicious and mistrustful
- Politicians with divided loyalties
- Pharma with insufficient innovation
- Pathos throughout the system
Do We Make Good Decisions? Are We Wise?

• Goal: universal vaccine coverage
• We devote $10^7$ dollars/yr to develop “programs” to increase immunization rates
• These programs are neither highly innovative, nor highly successful
• Yet we keep on doing them...using the same assumptions...same techniques...same teams...same way...”eating soup with a fork” (D Berwick)
• In the meantime VPDs are costing us billions/year...
“The brain is a wonderful organ. It starts working the moment you get up in the morning and does not stop until you get into the office.”

- Robert Frost
# Recommended Adult Immunization Schedule—United States - 2015

Note: These recommendations must be read with the footnotes that follow containing number of doses, intervals between doses, and other important information.

Figure 1. Recommended adult immunization schedule, by vaccine and age group

<table>
<thead>
<tr>
<th>VACCINE</th>
<th>AGE GROUP</th>
<th>19-21 years</th>
<th>22-26 years</th>
<th>27-49 years</th>
<th>50-59 years</th>
<th>60-64 years</th>
<th>≥ 65 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza</td>
<td>1 dose annually</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tetanus, diphtheria, pertussis (Td/Tdap)</td>
<td>Substitute 1-time dose of Tdap for Td booster; then boost with Td every 10 yrs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Varicella</td>
<td>2 doses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human papillomavirus (HPV) Female</td>
<td>3 doses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human papillomavirus (HPV) Male</td>
<td>3 doses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zoster</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measles, mumps, rubella (MMR)</td>
<td>1 or 2 doses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pneumococcal 13-valent conjugate (PCV13)</td>
<td>1-time dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Pneumococcal polysaccharide (PPSV23)</td>
<td>1 or 2 doses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meningococcal</td>
<td>1 or more doses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>2 doses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>3 doses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haemophilus influenzae type b (Hib)</td>
<td>1 or 3 doses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Covered by the Vaccine Injury Compensation Program

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For all persons in this category who meet the age requirements and who lack documentation of vaccination or have no evidence of previous infection; zoster vaccine recommended regardless of prior episode of zoster

Recommended if some other risk factor is present (e.g., on the basis of medical, occupational, lifestyle, or other indication)

No recommendation

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Report all clinically significant postvaccination reactions to the Vaccine Adverse Event Reporting System (VAERS). Reporting forms and instructions on filing a VAERS report are available at www.vaers.hhs.gov or by telephone, 800-822-7967.

Information on how to file a Vaccine Injury Compensation Program claim is available at www.hrsa.gov/vaccinecompensation or by telephone, 800-338-2382. To file a claim for vaccine injury, contact the U.S. Court of Federal Claims, 717 Madison Place, N.W., Washington, D.C. 20001; telephone, 202-357-6400.

Additional information about the vaccines in this schedule, extent of available data, and contraindications for vaccination is also available at www.cdc.gov/vaccines or from the CDC-INFO Contact Center at 800-232-INFO (800-232-4636) in English and Spanish, 8:00 a.m. - 8:00 p.m. Eastern Time, Monday - Friday, excluding holidays.

Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

The recommendations in this schedule were approved by the Centers for Disease Control and Prevention's (CDC) Advisory Committee on Immunization Practices (ACIP), the American Academy of Family Physicians (AAFP), the America College of Physicians (ACP), American College of Obstetricians and Gynecologists (ACOG) and American College of Nurse-Midwives (ACNM).

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### Figure 2. Vaccines that might be indicated for adults based on medical and other indications

<table>
<thead>
<tr>
<th>VACCINE ▼</th>
<th>INDICATION ▼</th>
<th>Pregnancy</th>
<th>Immuno-compromising conditions (including human immunodeficiency virus [HIV])</th>
<th>HIV Infection</th>
<th>Men who have sex with men (NSM)</th>
<th>Kidney failure, end-stage renal disease, receipt of hemodialysis</th>
<th>Heart disease, chronic lung disease, chronic alcoholism</th>
<th>Asplenia (including elective splenectomy and persistent complement component deficiencies)</th>
<th>Chronic liver disease</th>
<th>Diabetes</th>
<th>Health care personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza</td>
<td>3</td>
<td>1 dose ILV annually</td>
<td>1 dose ILV or IIV annually ifanos</td>
<td>1 dose ILV annually</td>
<td>1 dose IIV annually</td>
<td>1 dose IIV annually</td>
<td>1 dose IIV annually</td>
<td>1 dose IIV annually</td>
<td>1 dose IIV annually</td>
<td>1 dose IIV annually</td>
<td>1 dose IIV annually</td>
</tr>
<tr>
<td>Tetanus, diphtheria, pertussis (Td/Tdap)</td>
<td>3</td>
<td>1 dose Tdap each pregnancy</td>
<td>Substitute 1-time dose of Tdap for Td booster; then boost with Td every 10 yrs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VZV (Varicella)</td>
<td>3</td>
<td>Contraindicated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human papillomavirus (HPV) Female</td>
<td>3</td>
<td>2 doses</td>
<td>3 doses through age 26 yrs</td>
<td>3 doses through age 26 yrs</td>
<td>3 doses through age 26 yrs</td>
<td>3 doses through age 26 yrs</td>
<td>3 doses through age 26 yrs</td>
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<td>3 doses through age 26 yrs</td>
<td>3 doses through age 26 yrs</td>
</tr>
<tr>
<td>Human papillomavirus (HPV) Male</td>
<td>3</td>
<td>3 doses through age 26 yrs</td>
<td>3 doses through age 26 yrs</td>
<td>3 doses through age 26 yrs</td>
<td>3 doses through age 26 yrs</td>
<td>3 doses through age 26 yrs</td>
<td>3 doses through age 26 yrs</td>
<td>3 doses through age 26 yrs</td>
<td>3 doses through age 26 yrs</td>
<td>3 doses through age 26 yrs</td>
<td>3 doses through age 26 yrs</td>
</tr>
<tr>
<td>Zoster</td>
<td>3</td>
<td>Contraindicated</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
</tr>
<tr>
<td>Measles, mumps, rubella (MMR)</td>
<td>3</td>
<td>Contraindicated</td>
<td>1 or 2 doses</td>
<td>1 or 2 doses</td>
<td>1 or 2 doses</td>
<td>1 or 2 doses</td>
<td>1 or 2 doses</td>
<td>1 or 2 doses</td>
<td>1 or 2 doses</td>
<td>1 or 2 doses</td>
<td>1 or 2 doses</td>
</tr>
<tr>
<td>Pneumococcal 13-valent conjugate (PCV13)</td>
<td>3</td>
<td>1 dose</td>
<td></td>
<td></td>
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<td>Pneumococcal polysaccharide (PPSV23)</td>
<td>3</td>
<td></td>
<td>1 or 2 doses</td>
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<td></td>
</tr>
<tr>
<td>Meningococcal</td>
<td>3</td>
<td></td>
<td>1 or more doses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis A</td>
<td>3</td>
<td></td>
<td>2 doses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>3</td>
<td></td>
<td>3 doses</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haemophilus influenzae type b (Hib)</td>
<td>3</td>
<td></td>
<td>post-HSCT recipients only</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

*Covered by the Vaccine Injury Compensation Program

For all persons in this category who meet the age requirements and who lack documentation of vaccination or have no evidence of previous infection; zoster vaccine recommended regardless of prior episode of zoster

Recommended if some other risk factor is present (e.g., on the basis of medical, occupational, lifestyle, or other indications)

No recommendation

These schedules indicate the recommended age groups and medical indications for which administration of currently licensed vaccines is commonly recommended for adults ages 19 years and older, as of February 1, 2015. For all vaccines being recommended on the Adult Immunization Schedule, a vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Licensed combination vaccines may be used whenever any components of the combination are indicated and when the vaccine's other components are not contraindicated. For detailed recommendations on all vaccines, including those used primarily for travelers or that are issued during the year, consult the manufacturers’ package inserts and the complete statements from the Advisory Committee on Immunization Practices (www.cdc.gov/vaccines/hcp/advisory-series.html). Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

## Baseline Vaccination Rates vs Healthy People 2020 Goals: Gaps Persist

<table>
<thead>
<tr>
<th>Vaccine and Group</th>
<th>Baseline Rate (year)</th>
<th>Healthy People 2020 Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noninstitutionalized, 18-64 years</td>
<td>25% (2008)</td>
<td>80%</td>
</tr>
<tr>
<td>Noninstitutionalized, ≥ 65 years</td>
<td>67% (2008)</td>
<td>90%</td>
</tr>
<tr>
<td>Healthcare workers</td>
<td>45% (2008)</td>
<td>90%</td>
</tr>
<tr>
<td>Pregnant women</td>
<td>28% (2008)</td>
<td>80%</td>
</tr>
<tr>
<td>Pneumococcal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≥ 65 years</td>
<td>60% (2008)</td>
<td>90%</td>
</tr>
<tr>
<td>High-risk, &lt; 65 years</td>
<td>17% (2008)</td>
<td>60%</td>
</tr>
<tr>
<td>Institutionalized adults</td>
<td>66% (2006)</td>
<td>90%</td>
</tr>
<tr>
<td>Zoster</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≥ 60 years</td>
<td>7% (2008)</td>
<td>30%</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Healthcare workers</td>
<td>64% (2008)</td>
<td>90%</td>
</tr>
</tbody>
</table>

“Every system is perfectly designed to achieve exactly the results it gets.”
We Have Failed Adults – IOM Report 2000

• VPD mortality is 166-fold higher in adults than children (50,000 vs 300)

• GAO (1995): “CDC spends little on adult immunization activities”
  • 1994: NIP received $528 million for immunization programs, <1% went to adult programs
  • 1987–1994: NIP had 278 FTE’s, only 5 (1.7%) devoted to adult activities
  • <2% of section 317 funds go to adult imm programs

• FY 2000, < 2.3% of NIP funds went to adult immunization

• Over the last 7 years, CDC has spent > $200 million on childhood imm registries (more than on all adult imm activities for the last decade)
The Sisyphus Curse?

“The gods had condemned Sisyphus to ceaselessly rolling a rock to the top of a mountain, whence the stone would fall back of its own weight. They had thought with some reason that there is no more dreadful punishment than futile and hopeless labor.”

~ Albert Camus~
“Do or do not...there is no try.”

Yoda the Jedi Knight Trainer
ACA and Adult Vaccines

Strengthening Access to Immunization

The Affordable Care Act includes the following immunization-related provisions:

• States can purchase adult vaccines with state funds from federally-negotiated contracts.
• Reauthorizes the Section 317 Immunization Grant Program, which makes available federally purchased vaccines and grants to all 50 states, to provide immunization services to priority populations.
• Requires a General Accountability Office (GAO) study and report to Congress about Medicare beneficiary access to recommended vaccines under the Medicare Part D benefit.
• Must provide without co-pay ACIP-recommended vaccines.
• When immunization of older adults is as important a standard of quality of medical care as it is in pediatrics

• When government, public health, and pharma resources are aligned ("a system with accountability")

• When age is valued

• When we create a compelling meta-narrative for action...like what?
HPV is sexually transmitted cancer.
39 y/o Single Mom of Three Children
What Is Needed

- An over-arching metanarrative that galvanizes efforts to protect individual, community, and population-level health
- Priority matrix
- An adequate and stable funding plan
- Tactical plan informed by 21st century transformation teams
- Experiment, measure, revise, experiment…
Summary

- Set explicit priorities and goals...
- Use the tools and methods of innovation and transformation...
- Communicated as *story* and *parables*...
- Developed by 21st century teams...
- With champions and funding...
- Who create a new meta-narrative...
- That results in near universal vaccine coverage and high use of preventive services!
National Policy Consensus Project
(policyconsensus.org)
Access to Healthcare

Three “Golden Keys”:
1. Care is available
2. Care is appropriate
3. Care is affordable
1. State and federal regulations and requirements should be flexible enough to be changed when needed.

Regulations are meant to protect the public and its resources—*but not from the public’s own good ideas.*
2. Top-level leadership should be willing to participate fully, and take risks.

Governors, legislators, state officials, and foundations often recognize windows of opportunity that community members are unaware of.
3. Policymakers and convenors should ensure that skilled technical assistance, including data analysis and conflict resolution, is available to stakeholders.
4. State leaders should look creatively at financing, particularly leveraging and rearranging of resources.
What Can States Do?

5. The state should provide incentives for both private and public sector participation.

State leaders can require or offer incentives to businesses, foundations, and others in the private sector to come to the table.
What Can States Do?

6. States should support development of community health centers and safety net providers.

State support of safety net clinics can mean the difference between expansion and closure. The safety net today makes possible the implementation of Medicaid and, increasingly, Medicare.
7. Leaders—including governors, legislators, and state and federal agencies—should use their ability to convene to bring all essential parties to the table.
Another Option

If a private donor could be identifies who would provide each of you a $1,000,000 “grant” \textbf{IF} you developed legislation and policies that materially improved the health of your states and communities – could/would you do it?
Bottom Line

• We have let political and personal agendas dominate healthcare policy and practice
• We have let lawyers and businesses dictate policy and legislation
• Be an informed champion and advocate
• As a legislator you have the opportunity to be a servant–leader
• To do otherwise is to pay a “health price” higher than you ever thought you, your family and your neighbor ever would…
• The Golden Rule remains the best rule…
“The main thing is to keep the main thing, the main thing.”
Two Rules For Success:
1. Never tell everything you know.
Thank-you!

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