The Time Is Now: Integrating Primary Care, Behavioral Health, & Public Health

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Disclosure Slide

I have no conflicts of interest related to my presentation today.

In compliance with the AMA Conflict of Interest Guidelines, this includes no “material financial conflict of interest” and no “personal conflict of interest.”
Learning Objectives

- Brief review: US healthcare expenditures
- Overview: Lane Co. Health & Human Services
- Experiential Report: Integration of Primary Care & Behavioral Health
- CCO Opportunities: Integrating Public Health & Primary Care
How Did We Get Here?

U.S. Health Care Expenditures as a % of GDP

Source: Centers for Medicare & Medicaid Services, Office of the Actuary

NOTE: United States Nominal Gross Domestic Product in 2010 = $14.7 trillion
Where is "Here?"

International Comparison of Spending on Health, 1980-2008

Total expenditures on health as percent of GDP

we are here, We Are Here, WE ARE HERE!

Source: OECD Health Data 2010 (Oct. 2010).
Where Are We Going?

Projected Health Care Cost Growth if Historical Average Rate of Increase Persists

Source: Congressional Budget Office
How did we get here?

Where is “Here?”

Where are we going?

And what’s “The County” got to do with it?
Health and Human Services: Lane County

- Lane County Board of Commissioners
- LaneCare
- Lane County Public Health
- Community Health Centers of Lane County (FQHC)
- Mental Health Organization (Capitated for OHP)
- Community Health & Prevention
- Clinical Services: Primary Care, Behavioral Health, Prenatal, Dental
- • Public Health Authority
- • Mental Health Authority

Health and Human Services: Lane County
Public Health Authority

(ORS 431.416)

- Epidemiology & control of preventable diseases

- Parent and child health services, including family planning clinics (as described in ORS 435.205)

- Collection and reporting of health statistics

- Health information and referral services

- Environmental health services
Mental Health Authority
(ORS 426.233)

- Pre-commitment investigation & court testimony for commitment
- Abuse investigation & reporting
- Biennial comprehensive community needs assessment & State plan for services
- Primary & secondary prevention activities
- Establish & utilize community advisory board
- Co-management of State Hospital patients
FQHC: Number of Encounters

- 2007 - CHCLC only
- 2008 – added LCBH (data unknown for 2008)
- October 2010 – added Methadone Treatment
Patient Demographics – 2011

Income (%FPL)

<table>
<thead>
<tr>
<th>Category</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
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<tbody>
<tr>
<td>100% or below</td>
<td>14451</td>
<td>2972</td>
<td></td>
</tr>
<tr>
<td>101-150%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>151-200%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over 200%</td>
<td>1320</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td>1222</td>
<td></td>
<td>2486</td>
</tr>
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</table>

Percentage Unknown:
- 2009 – 23%
- 2010 – 3%
- 2011 – 11%
Patient Demographics – 2011

Medical Insurance Source

- **Medicaid**: 9,770 (43%)
- **Medicare**: 1,261 (6%)
- **Private**: 4,709 (21%)
- **Uninsured**: 6,431 (29%)
- **Other Public (Oregon Contraceptive Care)**: 280 (1%)

Other Public (Oregon Contraceptive Care): 280 (1%)
That’s our........

Here’s what we are doing!
Integrated Behavioral Health

- Model:
  - Embedded Psych NP and MH specialist
  - Side by side with PC team

- Goals:
  1.) Improve health outcomes
  2.) Ease MH burden for PC team
  3.) Improve patient experience
  4.) Improve staff experience
  5.) Save money
Integrated Behavioral Health

- IBH initiated by PC team; no external referrals, no care provided without PC team coordination
- Warm handoffs vital component
- PCMH focused
- Psych NP med management limited; care returned to PCP
- IHC consultation contract
Integrated Behavioral Health

- Begun July 2011
- 259 pts., 54% Medicaid
- Average 4 encounters pppd
- PHQ-9
  - Avg score = 18.1
  - Avg somatic complaints = 6
- Dx: D>Anx>BP>PTSD
- 90% returned; 10% ongoing Th
Reverse BH Integration

- Begun late 2008
- PCMH focused
- Currently 518 shared patients
- Severe & persistent mentally ill population
- Approximately 65% of adults smoke
- High chronic disease burden
Reverse BH Integration

- Model:
  - FNP provider(s)
  - just in time curbside consults
  - daily team huddles
  - care team staffings biweekly
  - infrequent warm handoffs
  - shared progress notes
  - moving to shared records
Reverse BH Integration

Select Health Outcomes:

1.) 6% used ED ≥ 10 times

2.) Max = 45 ED visits in 2010

3.) Awaiting cost & “cost avoidance” data
Integrating Public Health & Primary Care
Health Reform & The Triple Aim

- Better care for individuals
- Better health for populations
- Lower cost growth thru improvements in care

Social Determinants of Health

“The circumstances in which people are born, grow up, live, work and age.”

Why treat people...

...without changing what makes them sick?
Social Determinants of Health

(“Where we live, labor, learn, play, and pray.”)

• Best estimates reveal that only 10 -15% of population health improvements have come from treatment-based advances

• 85 – 90% of population health improvements have come from prevention-based activities

Social Determinants of Health and Healthcare Solutions: Foege W, Public Health Reports Volume 125; 8-10
The Ultimate Measures of Health: Koh H, Public Health Reports, Volume 126;14-15
Managing the Public Health Enterprise: Edward Baker, 2010
Dominant Issues in Medical Sociology: Medical Measures & the Decline of Mortality
High Impact Population Health Projects: PH & PC horizon gazing

- Smoking in Pregnancy
- Vaccination rates
- Obesity rates
Children Are at Risk

Prenatal Smoking By Trimester, Oregon vs. Lane County, 2009

Data Sources: Oregon Health Authority and Lane County Public Health
### Lane County: Smoking in Pregnancy

<table>
<thead>
<tr>
<th>Age</th>
<th>Smoking Rate</th>
<th>Patient Number</th>
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<tr>
<td>&lt;20</td>
<td>27%</td>
<td>294</td>
</tr>
<tr>
<td>20 – 24</td>
<td>25%</td>
<td>860</td>
</tr>
<tr>
<td>25 - 29</td>
<td>16%</td>
<td>1,147</td>
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<tr>
<td>30 – 34</td>
<td>11</td>
<td>843</td>
</tr>
<tr>
<td>35 – 39</td>
<td>9</td>
<td>348</td>
</tr>
<tr>
<td>&gt;= 40</td>
<td>11</td>
<td>81</td>
</tr>
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Data Source: Lane County Vital Statistics: 2009-2011
Infant Hospitalization Costs: USA

- **Preterm/LBW (■):**
  - Discharges: 384,200
  - Total Costs: $5,786,932,000

- **Uncomplicated newborn (□):**
  - Discharges: 1,929,800
  - Total Costs: $1,223,076,000

- **All other (□):**
  - Discharges: 2,297,400
  - Total Costs: $5,338,421,000

- **Total:***
  - Discharges: 4,611,400
  - Total Costs: $12,401,449,000

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Pediatrics: Volume 120, Number 1, July 2007
Infant Morbidity & Mortality Attributable to Prenatal Smoking: ACPM 2010 Jul;39(1)45-52
Women and Smoking: A report of the Surgeon General 2001
Study ID: Helena Montana
ES (95% CI): 0.60 (0.21, 0.99)
Weight: 1.76

Study ID: Pueblo Colorado
ES (95% CI): 0.73 (0.63, 0.85)
Weight: 10.13

Study ID: Piedmont Italy
ES (95% CI): 0.89 (0.81, 0.98)
Weight: 12.14

Study ID: Bowling Green Ohio
ES (95% CI): 0.61 (0.55, 0.67)
Weight: 14.24

Study ID: New York State
ES (95% CI): 0.80 (0.80, 0.80)
Weight: 17.20

Study ID: Ireland
ES (95% CI): 0.89 (0.81, 0.97)
Weight: 12.56

Study ID: Saskatoon Canada
ES (95% CI): 0.87 (0.84, 0.90)
Weight: 16.35

Study ID: Rome Italy
ES (95% CI): 0.89 (0.85, 0.93)
Weight: 15.61

Study ID: Overall
ES (95% CI): 0.81 (0.76, 0.86)
Weight: 100.00

NOTE: Weights are from random effects analysis
Example #2: Vaccine Rates

Religious Exemption Rates, 2000-2011

- Children’s Facility
- Kindergarten and 1st Grade*
- 7th Grade
Religious Exemptions: Kindergartners, 2011

Integration Of Public Health Immunization Program with FQHC program.
Vaccine Preventable Diseases: Lane County 2009 - 11

Total reported cases Lane Co = 2,245

Hospitalized influenza = 222
---cost at $6,900/case = $1,531,800 (2004 dollars)

Pertussis = 118 (national estimate = 20% of reported cases hospitalized)
---cost at $9,586/case = $226,230

1.) AHRQ: Healthcare Cost & Utilization Project (Influenza)
2.) Lancet Infect Dis. 2003 Jul;3(7):413-8 (Pertussis)
3.) BMC Infectious Diseases 2005, 5:57 (Pertussis)
Example #3: Obesity Prevalence in Oregon Adults & 8th Graders

The New Public Health: Policy, systems, and environmental change

Source: Oregon BRFSS and Oregon Healthy Teens Survey
Current Public Health Obesity Work

• Public Health – FQHC Prevention Integration
• ACHIEVE grant: Policy, Systems, Env change
• WIC breast feeding & tobacco programs
• Maternal Child Health: home visiting programs
• Steering Committee for 4J food program
• Healthy Communities program
• Worksite Wellness Policies
• Healthy Corner Stores Initiative

What might these efforts produce?
Healthy Living Participants
Medical Care: Vermont 2005-2009

Visits to a health care provider’s office and the Emergency Dept decreased significantly at 6 & 12 months

MD Visits

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<th>Baseline</th>
<th>6 Months</th>
<th>12 Months</th>
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<tr>
<td>Visits</td>
<td>6.7</td>
<td>5.3</td>
<td>3.8</td>
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ED Visits

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>6 Months</th>
<th>12 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visits</td>
<td>0.56</td>
<td>0.43</td>
<td>0.38</td>
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</table>
Diabetes Related Hospitalizations, per 1,000 Vermonters with Diabetes
Hospitalizations: Lower Extremity Amputations per 1,000 Vermonters with Diabetes

1998 1999 2000 2001 2002 2003 2004 2005

- 1998: 8.3
- 1999: 8.1
- 2000: 8.7
- 2001: 9.0
- 2002: 6.5
- 2003: 7.0
- 2004: 7.6
- 2005: 5.5
Summary

- The Time to Integrate PH, PC, and MH is Now

- Lane Co. Public Health is the Middle Aim of the Triple Aim

- Lane Co. Behavioral Health & Community Health Clinics are part of a Medical Home solution
Questions???
How does Public Health fit into Health Reform?
Oregon: HB 3650

- Sections 6 & 29: “Each CCO shall implement... Patient Centered Medical Homes”

- Section 8: “…integrated and coordinated health care system to use wellness & prevention…”

- Section 17: “…reimbursement of nontraditional personnel such as...community health workers... peer wellness workers…”

Governor Kitzhaber signs into Law 7/01/2011; Role out begins 7/1/2012
Oregon: HB 3650

- Section 19: “...community centered health initiatives designed to address critical risk factors, especially those that contribute to chronic disease.”

- NCQA: PCMH requirements
Lane County CCO Roles
(or What Lane Co. Will Do For You!)

1.) Fulfill requirements of Public Health Authority
2.) Fulfill requirements of Mental Health Authority
3.) Collect & analyze population level surveillance data
4.) Perform Community Health Assessments
5.) Develop Community Health Improvement Plans
6.) Continue serving as a primary care safety net clinic
7.) Identify, prioritize, and direct resourcing of local population health goals
Factors that Affect Health

Impact

Socioeconomic Factors

Changing the Context
to make individuals’ default decisions healthy

Long-lasting Protective Interventions

Clinical Interventions

Counseling & Education

Examples

Eat healthy, be physically active

Rx for high blood pressure, high cholesterol

Immunizations, cessation treatment, colonoscopy

Fluoridation, smoke-free laws, tobacco tax

Poverty, education, inequality