The Demand for Physicians, NPs, and PAs in Oregon: 2013-2020

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How Many Providers Will We Need?

• Concern about access to care providers for the newly insured, as well as an aging, diversifying, and growing population

• Changes in how care is delivered and financed will likely impact demand for different professionals and skill sets, but how?

• Request from OHPB to project future demand while adjusting for potential changes related to health care transformation.
Existing Projections

Recently published projections and opinions vary:

- AAMC says 91,000 additional physicians needed nationwide by 2020 (evenly split PC and non-PC)
- Scott Gottlieb & Ezekiel Emanuel disagree (“No, there won’t be a doctor shortage” NYT opinion piece, Dec. 4)
- Robert Graham Center (AAFP) says 1,174 additional primary care physicians needed in Oregon by 2030 (or 38% increase)
- Green et al. argue that operational and technological innovations could eliminate primary care physician shortages
Existing Projections

• Empirical models, expert opinion, and everything in between

• Many projection studies focus solely on physicians or primary care

• Nationally, the AMA Masterfile is most common source for data on physicians; MEPS used frequently as basis for estimating utilization

• State-specific figures often obtained by applying national models to state-level data
Current Project

• Takes advantage of robust, state-level data resources:
  – Utilization from Oregon’s All-Payer, All-Claims (APAC) data system
  – Provider data from the Oregon Healthcare Workforce Licensing Database (OR HCWF), including location and hours worked
  – Detailed projections of changes in insurance coverage through 2020 from State Health Access Data Assistance Center (SHADAC, University of Minnesota)
  – Demographic forecasts from State Office of Economic Analysis (SOEA)

• Incorporates findings from the Oregon Health Insurance Experiment

• Produces state and county projections

• Incorporates scenarios for changes in care delivery and health systems transformation
Projection Model Components

• Current Utilization: Claims per person (APAC)
  – With assumptions for uninsured, Medicare FFS

• Current Provision: Claims per clinician hour, measured as full-time equivalents (FTE) (APAC and OR HCWF)

• Population and insurance coverage projections (SHADAC & OEA)
Projection Model

Projected:
• Population growth & aging (OEA)
• Changes in coverage (SHADAC)

Current per-person utilization

Clinician Provision

Baseline projection of future provider need
Alternate Scenarios

A. Medicaid transformation
   • 2% off growth rate for Medicaid utilization for 2013 & 2014

B. Team care/greater use of non-physician providers
   • The ratio of nurse-practitioners and physician assistants to physicians is increased by 12% over eight years

C. Health information technology
   • Increased adoption of full range of health IT/EHRs; increases provider productivity by 10%; phased in for 62% of clinicians evenly over 7 years

D. Scenarios B & C combined
Projection Model

Projected:
- Population growth & aging (OEA)
- Changes in coverage (SHADAC)

Current per-person utilization

Clinician Provision

Baseline projection of future provider need

- Adjustments for utilization based on health system transformation (A & D)
- Adjustments for provider productivity based on care model or technology (B,C & D)
- Adjusted projections of future provider need

Components (projections, utilization, provisions) can be disaggregated by county (and other factors)
Additional Methodology Notes

• Focused on physicians, NPs, and PAs
  – These professions typically serve as point of entry to care and practice relatively independently in Oregon
  – Lacking evidence and workforce data on other licensed professions

• Imputed most significant utilization not currently captured in APAC
  – Uninsured at 75% of Medicaid (Oregon Health Study)
  – Medicare FFS at rate of Medicare Advantage for specific area
Projected FTE Demand for Oregon's Physicians by Scenario: 2013-2020

Baseline

A: HST (2% reduced util for Medicaid)

B: Team Care (Increase NP+PA:MD ratio by 12%)

C: EHR (Saves 10% over 7 years)

D: Scenario B+C
Projected FTE Demand for Oregon’s Nurse Practitioners by Scenario: 2013-2020

- Baseline
- A: HST (2% reduced util for Medicaid)
- B: Team Care (Increase NP+PA:MD ratio by 12%)
- C: EHR (Saves 10% over 7 years)
- D: Scenario B+C
Projected FTE Demand for Oregon’s Physician Assistants by Scenario: 2013-2020

- A: HST (2% reduced util for Medicaid)
- B: Team Care (Increase NP+PA:MD ratio by 12%)
- C: EHR (Saves 10% over 7 years)
- D: Scenario B+C
Baseline Projected FTE Demand for Oregon's Physicians, NPs, and PAs: 2013-2020
Projected FTE Demand for Physicians Under Scenario D: 2013-2020
(TEAM CARE + HEALTH IT/EHR)
Projected FTE Demand for NPs and PAs Under Scenario D: 2013-2020
(Team Care + Health IT/EHR)
Findings Summary

• Baseline projections suggest a 16% growth in demand for the three clinician types.

• Alternate scenarios change projections significantly:
  – Est. physician demand varies from low of 7% growth under combined scenario (D) to high of 16% under baseline
  – Est. NP and PA demand varies from low of 11% growth under HIT scenario (C) to high of 24% under combined scenario (D)

• Coverage expansion accounts for a little less than half of additional projected demand in 2013 and 2014 but population growth & aging are most significant factors thereafter
Caveats & Limitations

• Uncertainty around some model elements

• Many factors unaccounted for, for example:
  – Other health professionals who are likely to play an increasing role in new models
  – Developments in medical knowledge and technology
  – Social forces

• Using 2012 provider count as a baseline incorporates current issues with mal-distribution

• Represents projected demand for clinicians. Supply issues (e.g., attrition) will be a factor.
Policy Implications

• Projected demand varies considerably under different, plausible scenarios but all produce estimates that outpace supply growth in recent years

• No one strategy will be enough to meet demand.

• Target finite resources to areas of greatest need.
Policy Implications

• Use proactive diversified approach to increase workforce capacity
  – Investments in workforce education & training, including new roles such as Traditional Health Workers
  – Financial support and technical assistance for practice redesign (e.g. PCPCH Institute & multi-payer agreement; EHR incentives)
  – Recruitment incentive programs such as the recent Medicaid primary care provider loan repayment program
Thoughts, comments, and questions?