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Collaborating to help Oregon tobacco users quit

Partners

- Oregon Health Authority
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- Oregon Coalition of Health Care Purchasers
  Barbara Prowe, Executive Director
- Oregon Health & Science University
  Rick Bentzinger, Vice President, Human Resources
- American Lung Association of the Mountain Pacific
  Oregon, Montana, Wyoming & Hawaii
  Sue Fratt, CEO

Sponsor

- Oregon Tobacco Prevention & Education Program, Department of Human Resources

Development and Coordination

- OHSU Smoking Cessation Center
  Wendy Bjornson, Director
  Elizabeth White, Manager

Brief Summary

Oregon Tobacco Use Prevalence*

Population		1996 prevalence	2007 prevalence
Adults		23.7%	17%
Youth	8th grade	21.6%	9%
	11th grade	27.6%	16.1%
Pregnant women		17.8%	11.7%
Adult Medicaid		43% (1999)	37%
Adult smokeless			7.6% males .3% females

* Tobacco Prevention and Education Program. Oregon Tobacco Facts & Laws. Portland, Oregon: Oregon Department of Human Services, Oregon Public Health Division, 2009.

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Insurance Coverage in Oregon

Health Insurance Status (2007 BRFSS)	Oregon Smokers	Oregon Nonsmokers
People with Medicaid	8%*	4%
People without insurance	32%	13%
People with medical insurance other than Medicaid**	60%**	83%
Total	100%	100%
*37% of adult Medicaid clients are smokers (CAHPS 2007) ** Estimate 70% fully insured; 30% self-insured		

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Program Intensity and Outcomes

Program Intensity	Quit Rates
Low (Clinician advice + NRT)	16%
High (Clinician advice + multiple counseling sessions + variety of medication choices)	32%

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National Recommendations*

- Effective benefit design for improving quit rates:
  - Covers at least four counseling (coaching) sessions of at least 30 minutes each, including telephone and individual sessions annually
  - Covers all FDA approved medications
  - Provides for both medications and counseling (coaching) for at least two quit attempts annually
  - Reduces access barriers by eliminating or minimizes co-pays or deductibles

*Rosenthal AC et al. Tobacco use treatment evidence-statement: screening, counseling and treatment. National Business Group on Health, 2006

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Predictors of Quitting*

Higher Quit Rates	Lower Quit Rates
High motivation to quit Ready to change Self-confidence about quitting Supportive social network	High nicotine dependence (severe withdrawal, heavy smoker, multiple quit attempts) Psychiatric co-morbidity High stress levels
Lower program intensity	Higher program intensity

* *Treating Tobacco Use and Dependence Clinical Practice Guideline*

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Cumulative Health Plan Return on Investment PMPM by Intervention* (10% enrollment)

	5 A's	5 A's + NRT	5 A's + Quitline	5 A's + Both
Base model				
Year 1	$ (0.11)	$ (0.56)	$ (0.43)	$ (0.75)
Year 2	$ 0.97	$ 0.43	$ 0.63	$ 0.23
Year 3	$ 1.72	$ 1.17	$ 1.38	$ 0.97
Year 4	$ 2.28	$ 1.74	$ 1.94	$ 1.54
Year 5	$ 2.48	$ 1.96	$ 2.14	$ 1.77

Incremental ROI compared to existing practice (2 As) in discounted 2007 dollars. Negative numbers in first year represent program costs PMPM.
*Source: Center for Health Research (www.businesscaseroi.org)

Sensitivity Analysis: Changing disenrollment, reach, efficacy, and SRD rates affected the ROI estimates but not the conclusions.

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Benefit Options

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Getting into treatment

- Proactive
  - Treatment less likely to be sought
  - More likely to accept if offered or prompted
- Treatment initiated:
  - During hospital stay
  - At outpatient visits
  - In response to promotions, screenings
- Treatment costs usually for treatment itself (meds + counseling)

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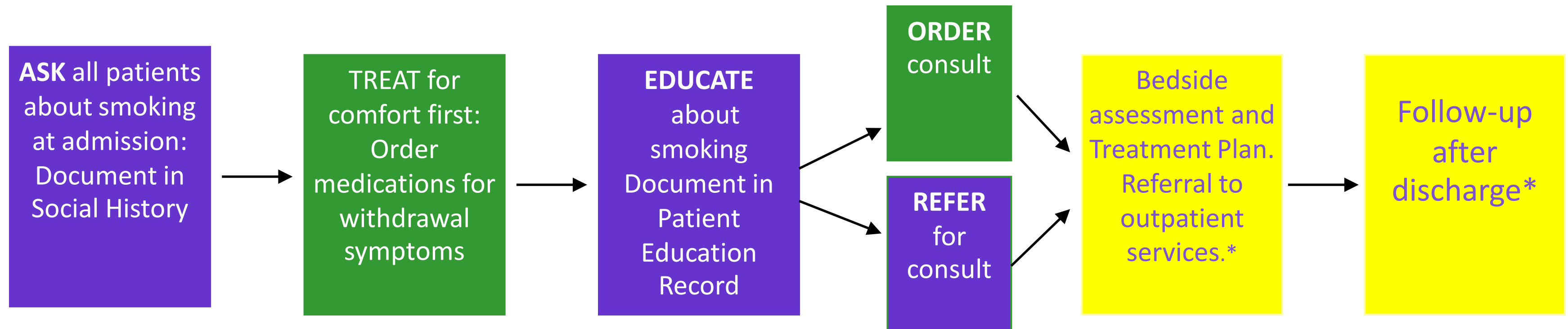
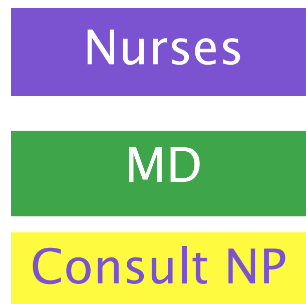
Program design: inpatient referral



* Benefit costs



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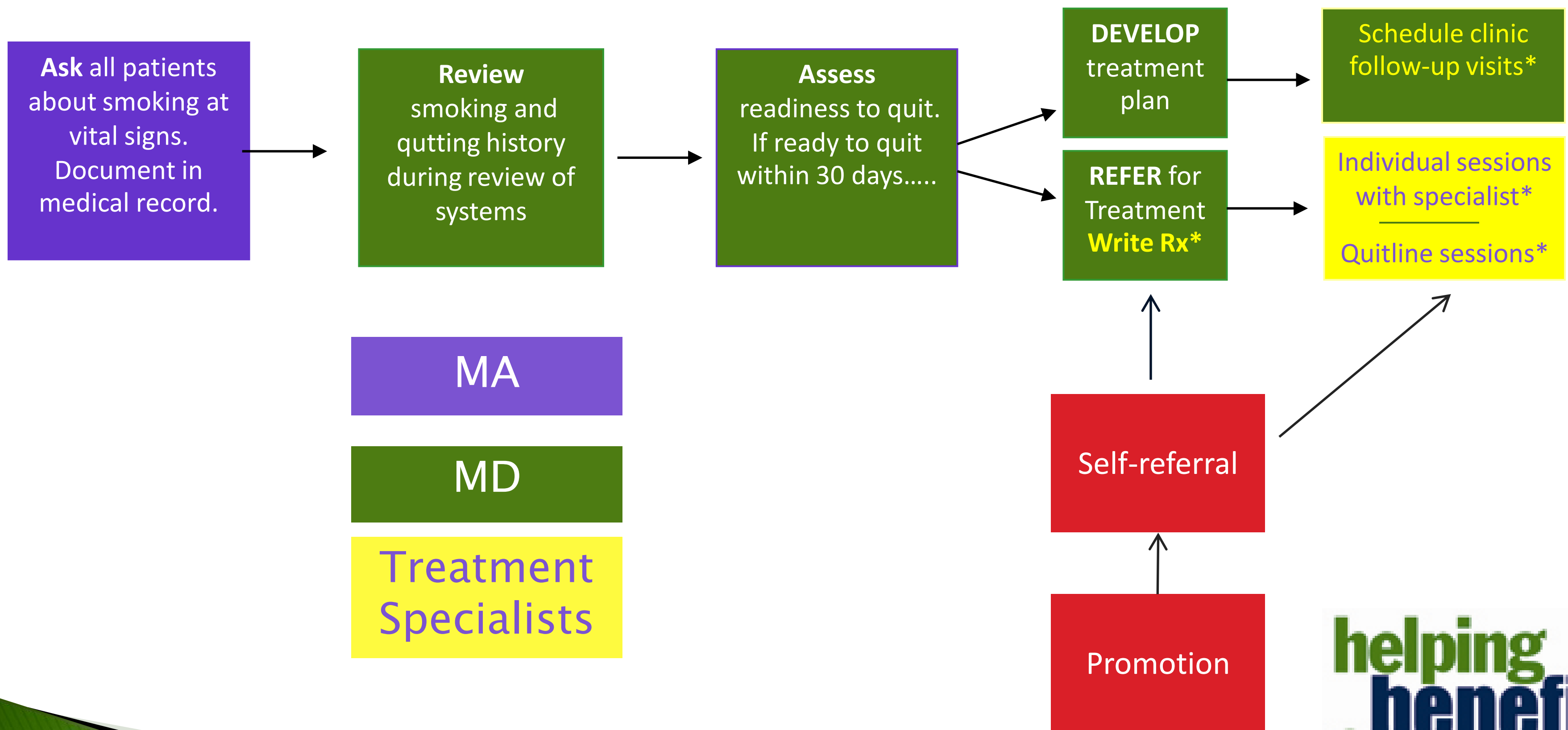
Program Design: Outpatient



* Benefit costs

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Medication Options*

Medication	Odds Ratios	Abstinence Rates	Cost per course of treatment**
Placebo	1.0	13.8%	
Varenicline (2 mg/day)	3.1 (2.5–3.8)	33.2 (28.9 – 37.8)	$307 (10 wks)
Bupropion SR	2.0 (1.8–2.2)	24.2 (22.2–26.4)	$270 (10 wks)
Nicotine patch	1.9 (1.7–2.2)	23.4 (21.3–25.8)	$149 (10 wks)
Nicotine gum	1.5 (1.2–1.7)	19.0 (16.5–21.9)	$185 (10 wks)
Long term patch (> 14 weeks)	1.9 (1.7–2.3)	23.4 (21.3–25.8)	$238 (16 wks)
Long term gum (>14 weeks)	2.2 (1.5–3.2)	26.1 (19.7–33.6)	$295 (16 wks)
Long term patch + ad lib NRT	3.6 (2.5–5.2)	36.5 (28.6–45.3)	$386 (16 wks)
Patch + Bupropion SR	2.5 (1.9–3.4)	28.9 (23.5–35.1)	$419 (10 wks)

*Treating Tobacco Use and Dependence: 2008 Update

** OHSU Drug Information Service June 2010; average wholesale, generic when available
Murray, L. Drug Topics Red Book. Montvale, NJ: Thomspn Healthcare; 2009:290, 613, 866 and 951.

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Effectiveness relative to nicotine patch*

Medication	Odds Ratios
Nicotine Patch (reference group)	1.0
Varenicline (2 mg/day)	1.6 (1.3–2.0)**
Bupropion SR	1.0 (0.9–1.2)
Nicotine gum	0.8 (0.6–1.0)
Long term patch (> 14 weeks)	1.0 (0.9–1.2)
Long term gum (>14 weeks)	1.2 (0.8–1.7)
Long term patch + ad lib NRT	1.9 (1.3–2.7)**
Patch + Bupropion SR	1.3 (1.0–1.8)

*Treating Tobacco Use and Dependence: 2008 Update
** More effective than patch

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Counseling options*

Format	Odds Ratios	Abstinence Rates
Proactive quitines	1.2 (1.1–1.4)	13.1(11.4–14.8)
Group counseling	1.3 (1.1–1.6)	13.9 (11.6–16.1)
Individual counseling	1.7 (1.4–2.0)	16.8 (14.7–19.1)
* Compared to no counseling		

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Combined options and costs

Option	Odds ratios	Estimated quit rates	Estimated costs for combined course of treatment
Quitline with meds	1.3 (1.1–1.6) vs. medication alone	28.1 (24.5–32.0)	$350–$400
Face to face counseling with meds	1.3 (1.1–1.5) vs. medication alone	26.9 (24.3–29.7)	$350–$450

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Quitting is dynamic and lengthy

- Many smokers need 5–7 serious quit attempts before quitting permanently
- Stabilize over several years
  - Repeated stops and starts are normal and common
  - May use meds to cut down before quitting
- Retreatment with same meds is often not effective (assuming used properly). Need variety of options.

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OHSU Employee Program

- 12,000+ employees; estimate 16% smoking rate.
- Benefit includes coverage of FDA approved medications, counseling program by trained coaches through Wellness, OTC products only available through OHSU pharmacies.
- Reduced barriers: no co-pay, eligible 3X annually, enroll through Wellness, facilitate prescriptions through OHSU pharmacy.
- App. 300 enrolled March 2007 – Dec 2009.

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OHSU Employee Program

- 55% response rate at 12 months
- 36% report abstinence
- 72% report using medications
  - 88% Chantix
  - 25% lozenge
  - 15% patch
  - 8% gum
- Length of medication use
  - Up to 2 weeks = 20%
  - 2-4 weeks = 21%
  - 1-2 months = 28%
  - > 2 months = 27%
  - Current = 5%

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OHSU Employee Program at 12 months

Quitting patterns	Percent
Quit then started again	37%
Didn’t quit but cut down	19%
Didn’t quit but still trying	7%
Didn’t quit but not trying	3%
Sustained quit	19%
Other	15%
Planning to quit again within 30 days	23%
Planning to quit within 6 mo.	35%

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OHSU Employee Program at 12 months

24 hour quit attempts	Percent
Haven't used since start	15%
1 time	9%
2 times	17%
3 times	22%
4 times	4%
More than 4 times	27%
Did not quit	14%

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Key points

- Many patients need multiple courses of treatment for multiple quit attempts (5-7) to successfully stop.
- Patients with more complications usually need more treatment.
- Benefit costs usually include only costs of medications and counseling services.
- Proactive treatment initiation (in hospital, clinic, promotion for self referral) is needed to be effective.

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Key points

- First line medications have similar outcomes; varenicline and combination NRT are superior.
- Counseling can be from primary provider (uncommon) from quitlines, trained specialists for individual sessions, sometimes in groups.
- Benefit costs vary – negotiated prices on medications and services.
- Estimate that $500 app. = 1+ course of treatment for meds + counseling

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Getting Started

- Who do you think are the audiences for our document?
- What do you think are the best ways to reach them?
- What are the key points that you think should be included?

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