Practice Guidelines & Implementation into Clinical Practice

Treatment Pathways

National Cancer Policy Forum Workshop:
Policy Issues in the Development and Adoption of Molecularly Targeted Therapies for Cancer

November 10, 2014

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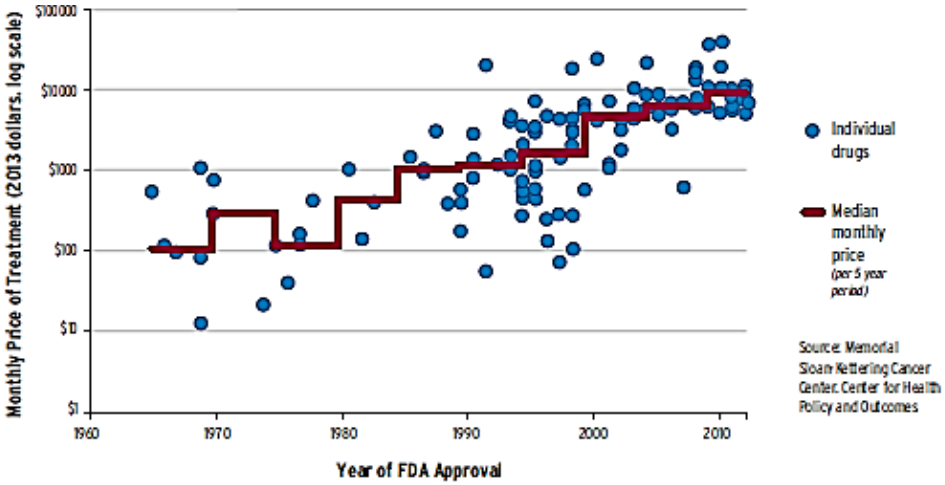
WellPoint, Inc.

WELLPOINT

New cancer drugs are more expensive . . . and producing less value

Monthly cost at the time of FDA approval (1965 – 2013)



13 new cancer treatments approved by FDA in 2012

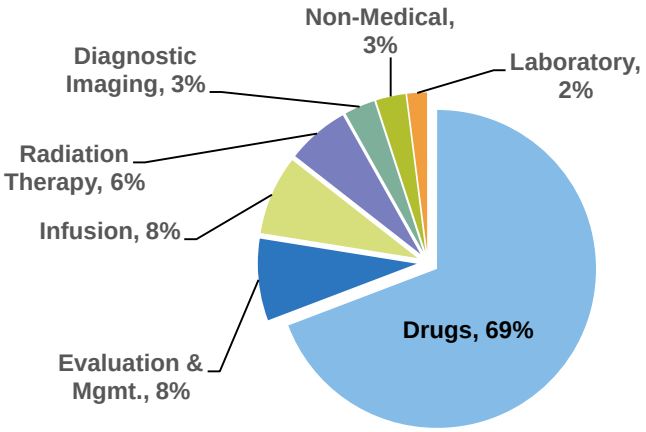
1	2	$5,900
Survival extended by 6 months	Survival extended by only 4-6 weeks	Average cost of treatment per month

Source: American Society of Clinical Oncology. The State of Cancer Care in America. 2014.. Source: Emanuel et al, New York Times, A Plan To Fix Cancer Care, March 23, 2013, retrieved from http://opinionator.blogs.nytimes.com/2013/03/23/a-plan-to-fix-cancer-care/?_r=0

Cancer drug therapy accounts for 25% of cost of cancer care

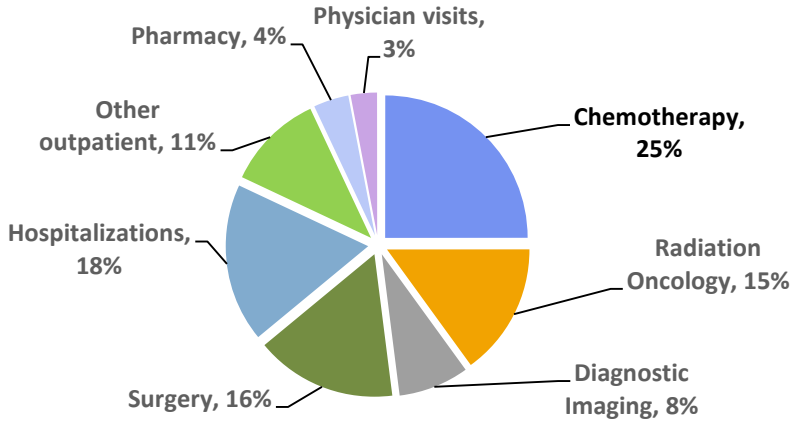
Oncology Practice Revenue Sources

Barr et al. J Oncol Pract. 2011;7: 2s-15s.



Chemotherapy Accounts for 25% of Cost

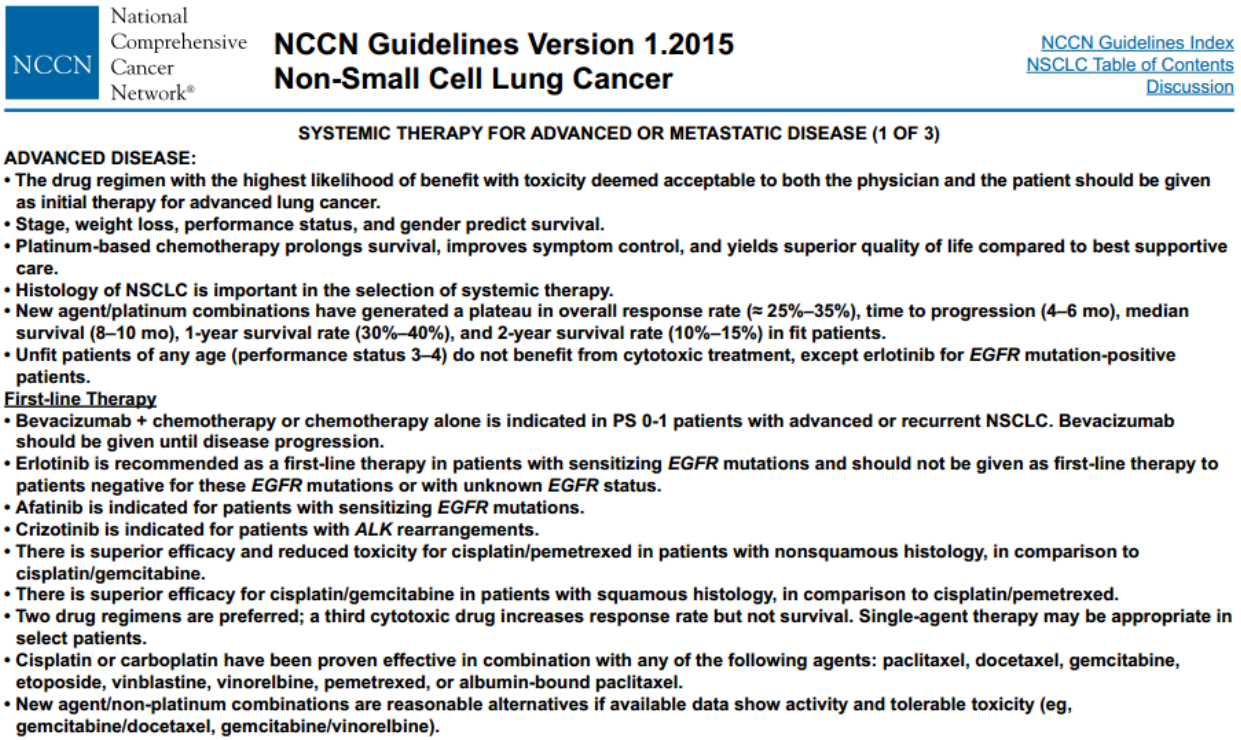
WellPoint affiliated health plans internal data 2012



Reimbursement model must change so that focus shifts to providing cancer care that is value-based and patient-centered.

Guidelines – very broad and inclusive

NCCN includes 64 platinum-based combinations as guideline-concordant treatment options for first line therapy of non-small cell lung cancer



National Comprehensive Cancer Network®

NCCN Guidelines Version 1.2015
Non-Small Cell Lung Cancer

NCCN Guidelines Index
NSCLC Table of Contents
Discussion

SYSTEMIC THERAPY FOR ADVANCED OR METASTATIC DISEASE (1 OF 3)

ADVANCED DISEASE:

- The drug regimen with the highest likelihood of benefit with toxicity deemed acceptable to both the physician and the patient should be given as initial therapy for advanced lung cancer.
- Stage, weight loss, performance status, and gender predict survival.
- Platinum-based chemotherapy prolongs survival, improves symptom control, and yields superior quality of life compared to best supportive care.
- Histology of NSCLC is important in the selection of systemic therapy.
- New agent/platinum combinations have generated a plateau in overall response rate (≈ 25%–35%), time to progression (4–6 mo), median survival (8–10 mo), 1-year survival rate (30%–40%), and 2-year survival rate (10%–15%) in fit patients.
- Unfit patients of any age (performance status 3–4) do not benefit from cytotoxic treatment, except erlotinib for *EGFR* mutation-positive patients.

First-line Therapy

- Bevacizumab + chemotherapy or chemotherapy alone is indicated in PS 0-1 patients with advanced or recurrent NSCLC. Bevacizumab should be given until disease progression.
- Erlotinib is recommended as a first-line therapy in patients with sensitizing *EGFR* mutations and should not be given as first-line therapy to patients negative for these *EGFR* mutations or with unknown *EGFR* status.
- Afatinib is indicated for patients with sensitizing *EGFR* mutations.
- Crizotinib is indicated for patients with *ALK* rearrangements.
- There is superior efficacy and reduced toxicity for cisplatin/pemetrexed in patients with nonsquamous histology, in comparison to cisplatin/gemcitabine.
- There is superior efficacy for cisplatin/gemcitabine in patients with squamous histology, in comparison to cisplatin/pemetrexed.
- Two drug regimens are preferred; a third cytotoxic drug increases response rate but not survival. Single-agent therapy may be appropriate in select patients.
- Cisplatin or carboplatin have been proven effective in combination with any of the following agents: paclitaxel, docetaxel, gemcitabine, etoposide, vinblastine, vinorelbine, pemetrexed, or albumin-bound paclitaxel.
- New agent/non-platinum combinations are reasonable alternatives if available data show activity and tolerable toxicity (eg, gemcitabine/docetaxel, gemcitabine/vinorelbine).

Variation in outcomes across 1st line regimens for non-small cell lung cancer*

	Estimated Survival (months)	Grade 3-4 Adverse Events	Any serious AE (Hospitalization)	Deaths on Rx (Deaths due to Rx)
Rx A	**13.0 (NR) mos.**	N/V risk: Moderate* FN + infection:1% Neuropathy: 11% Debilitating fatigue: 6%	53% (**)	<1% (<1%)
Rx B	**10.4 (9.6-11.2) mos.**	N/V risk: High FN + infection:4% Neuropathy: ND Debilitating fatigue: 5%	35% (**)	7% (1%)
Rx C	**11.8 (10.4-13.2) mos.**	N/V risk: High FN + infection:1% Neuropathy: ND Debilitating fatigue: 7%	37% (**)	7% (1%)
Rx D	**13.1 (NR) mos.**	N/V risk: Moderate FN + infection:1% Neuropathy: 3% Debilitating fatigue: 4%	** (**)	<1% (<1%)
Rx E	**13.4 (11.9-14.9) mos.**	N/V risk: Moderate FN + infection:4% Neuropathy: 4% Debilitating fatigue: 5% Bleeding 4%	75% (19%)	5% (4%)
Rx F	**12.6 (11.3- 14.0) mos.**	N/V risk: Moderate FN + infection:2% Neuropathy:0% Debilitating fatigue:11%	** (20%)	** (2%)

*** Non-squamous histology; first line platinum based chemotherapy indicated when no EGFR or ALK mutation present ** Not reported**

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Socinski JCO 2012; Sandler NEJM 2006:355; Scagliotti JCO 2008:26; Reck Annals of Oncology 2010; Patel 2012

Little variation in patient outcomes but marked variation in treatment cost

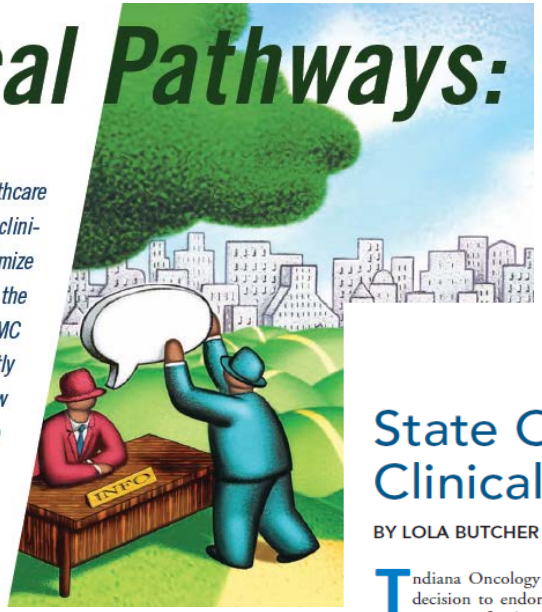
	Estimated Survival (months)	Deaths on Rx (Deaths due to Rx)	Cost (4 cycles)
Carbo/Paclitaxel	**13.0 (NR) mos.**	<1% (<1%)	**$452**
Gem/Cis	**10.4 (9.6-11.2) mos.**	7% (1%)	**$886**
Cis/Pemetrexed	**11.8 (10.4-13.2) mos.**	7% (1%)	**$25,619**
Carbo/nab-Paclitaxel	**13.1 (NR) mos.**	<1% (<1%)	**$24,740**
Carbo/Paclitaxel/Bev	**13.4 (11.9-14.9) mos.**	5% (4%)	**$39,770**
Carbo/Pemetrexed/Bev	**12.6 (11.3- 14.0) mos.**	** (2%)	**$64,988**

Socinski JCO 2012; Sandler NEJM 2006:355; Scagliotti JCO 2008:26; Reck Annals of Oncology 2010; Patel 2012

Pathways are widely discussed as key solution to escalating costs of cancer care

Clinical Pathways:

What happens when a healthcare institution creates its own clinical pathway process to optimize patient care while lowering the cost of cancer treatment? UPMC Cancer Centers has done exactly that and demonstrates how other institutions might be able to benefit from its experience.



Speak Up!

All Pathways Are Not Created Equal

BY PETER G. ELLIS, MD

State Oncology Groups Advance Clinical Pathways

ONCOLOGY TIMES
The Independent Hem/Onc News Source

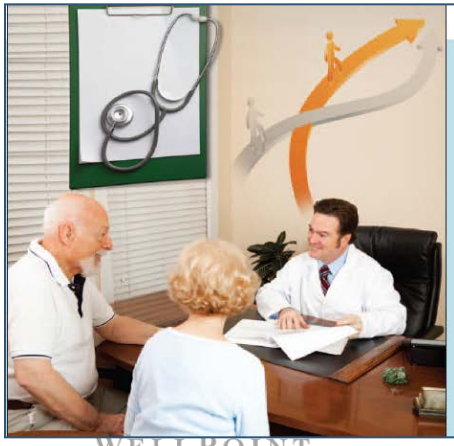
BY LOLA BUTCHER

Indiana Oncology Society's recent decision to endorse the pathways services of P4 Healthcare marks the third regional oncology organization to take a position on cancer care

"Increasingly, insurers are mandating that health care providers follow certain quality measures, or pathways, that define what constitutes appropriate services for the majority of our

Naveed Chowhan, MD, President of the Indiana society, said in a news release announcing the decision. "IOS is approaching this preemptively to ensure that cancer care providers not only assist in the development of the pathways to be used in Indiana, but are comfortable with them as well."

The Indiana group follows the lead of Oncology Physician Resource (OPR), a physician-owned group purchasing organization in Michigan. OPR worked with the state's biggest insurer to develop



Cancer Care Pathways Catching on with Payers

BY LOLA BUTCHER

Three pathways companies—Innovent Oncology, P4 Healthcare, and Via Oncology—are actively marketing their services to insurers, and others are expected to come on the scene soon. And while it is clear that the use of clinical pathways will change how oncologists are paid, exactly how that will play out is not.

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Strategies for Career Success

JOURNAL OF ONCOLOGY PRACTICE • VOL. 7, ISSUE 1

Strategic Use of Clinical Pathways

By Dean H. Gesme, MD, and Marian Wiseman, MA

Minnesota Oncology, Minneapolis, MN; Wiseman Communications, Washington, DC

What's involved in using clinical pathways in oncology practice? Who's using them, and why? Are they something your practice should consider?

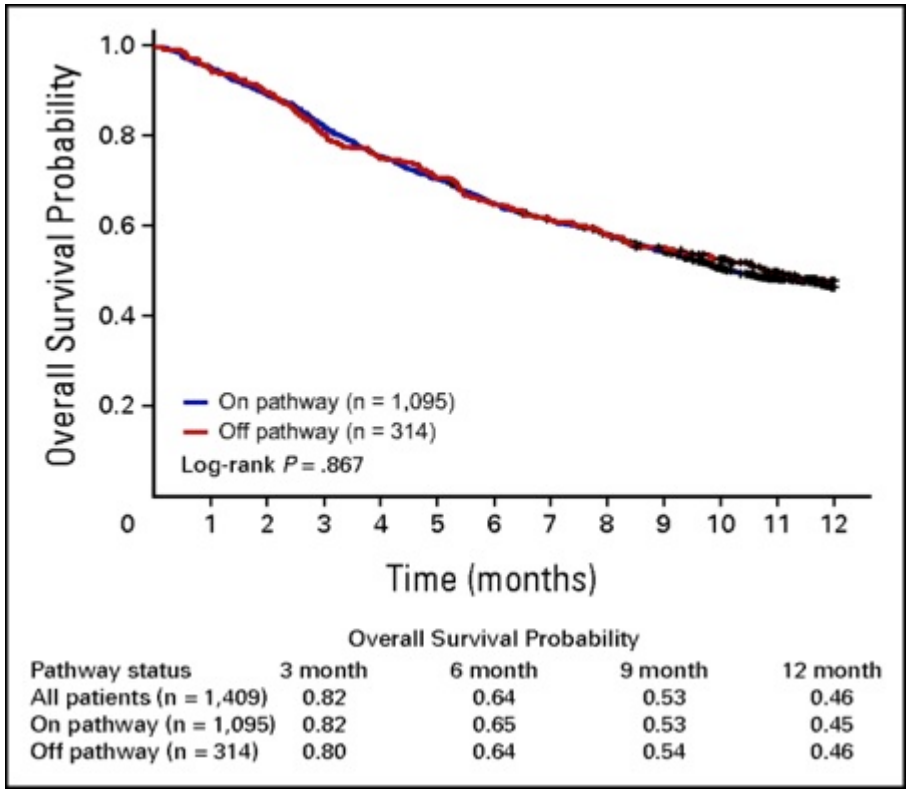
Some oncologists have embraced pathways, while others have resisted. "Some physicians will say it's too much of a cookie-cutter approach," comments oncologist Bruce A. Feinberg, DO, vice president and chief medical officer of P4 Healthcare, which develops oncology pathway programs and was acquired by Cardinal Health earlier this year. He goes on to say, "I always derived my greatest satisfaction from making the diagnosis,

The scope, granularity, and available options of pathways vary. For example, Via Oncology, a subsidiary of the University of Pittsburgh Medical Center, has pathways that cover 17 types of cancer and include prognostic testing such as KRAS and *Oncotype*DX, chemotherapy and biologic therapy, supportive care, and radiation therapy. Via is adding an end-of-life pathway in early 2011. Via's pathways have a single treatment protocol for each specific patient presentation, including stratification for scenarios such as poor performance or elderly status.

US Oncology found pathways associated with same overall survival and 30% lower cost

Outcomes associated with pathways vs. usual care for advanced non-small cell lung cancer

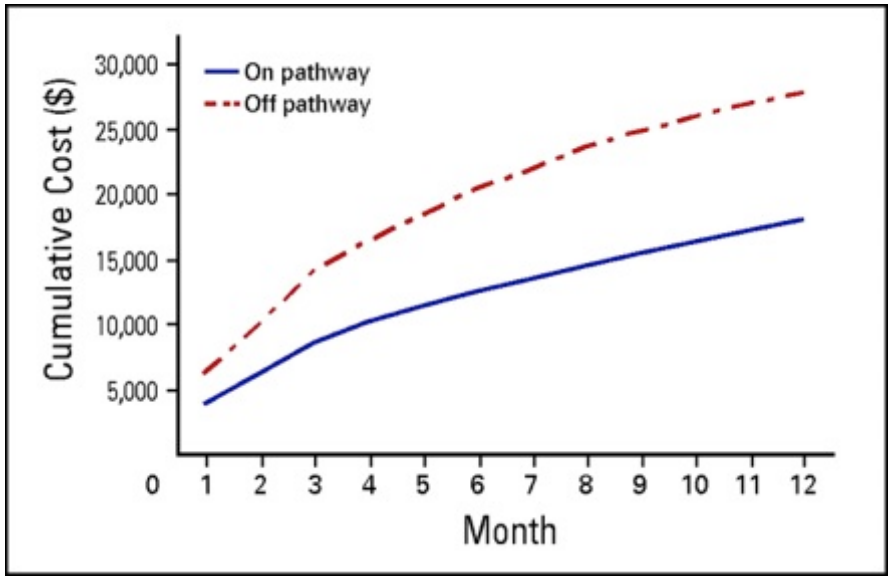
Overall survival by Pathway status



Overall Survival Probability

Pathway status	3 month	6 month	9 month	12 month
All patients (n = 1,409)	0.82	0.64	0.53	0.46
On pathway (n = 1,095)	0.82	0.65	0.53	0.45
Off pathway (n = 314)	0.80	0.64	0.54	0.46

12-month cumulative cost by Pathway status



Neubauer M A et al. JOP 2010;6:12-18

Pathway developers – multiple business models

Pharmaceutical Distributors

McKesson Specialty Health
Solutions for Oncology

Value Pathways powered by NCCN™

CardinalHealth

Provider Groups and Health Care Systems

via oncology™ pathways

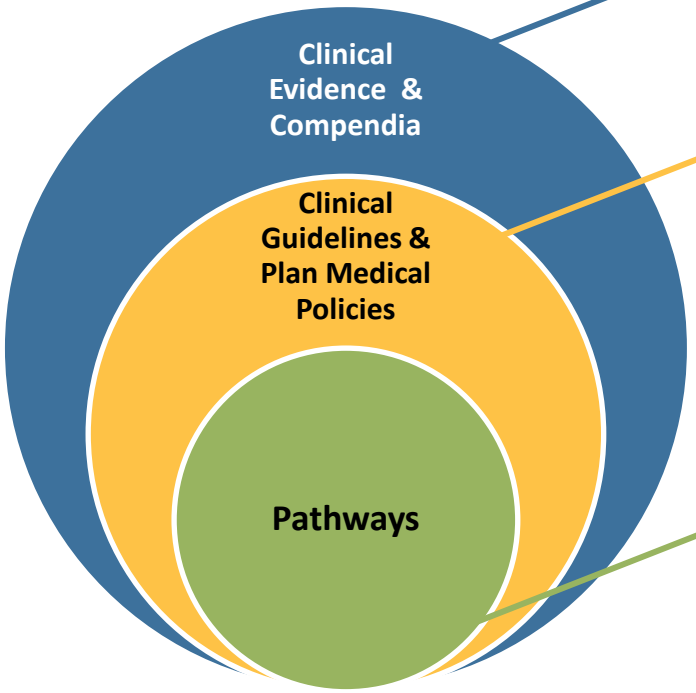
Care Management

New Century Health
Specialty care management that powers better care

Health Plans

WELLPOINT

WellPoint Approach to Pathway Development



Data from trials, publications, and compendia for many different patient populations are extracted, reviewed, and analyzed.

Medical evidence is synthesized by national experts into clinical guidelines. Evidence is also used by health plan committees to develop medical policies and utilization management guidelines used in making benefit coverage determinations.

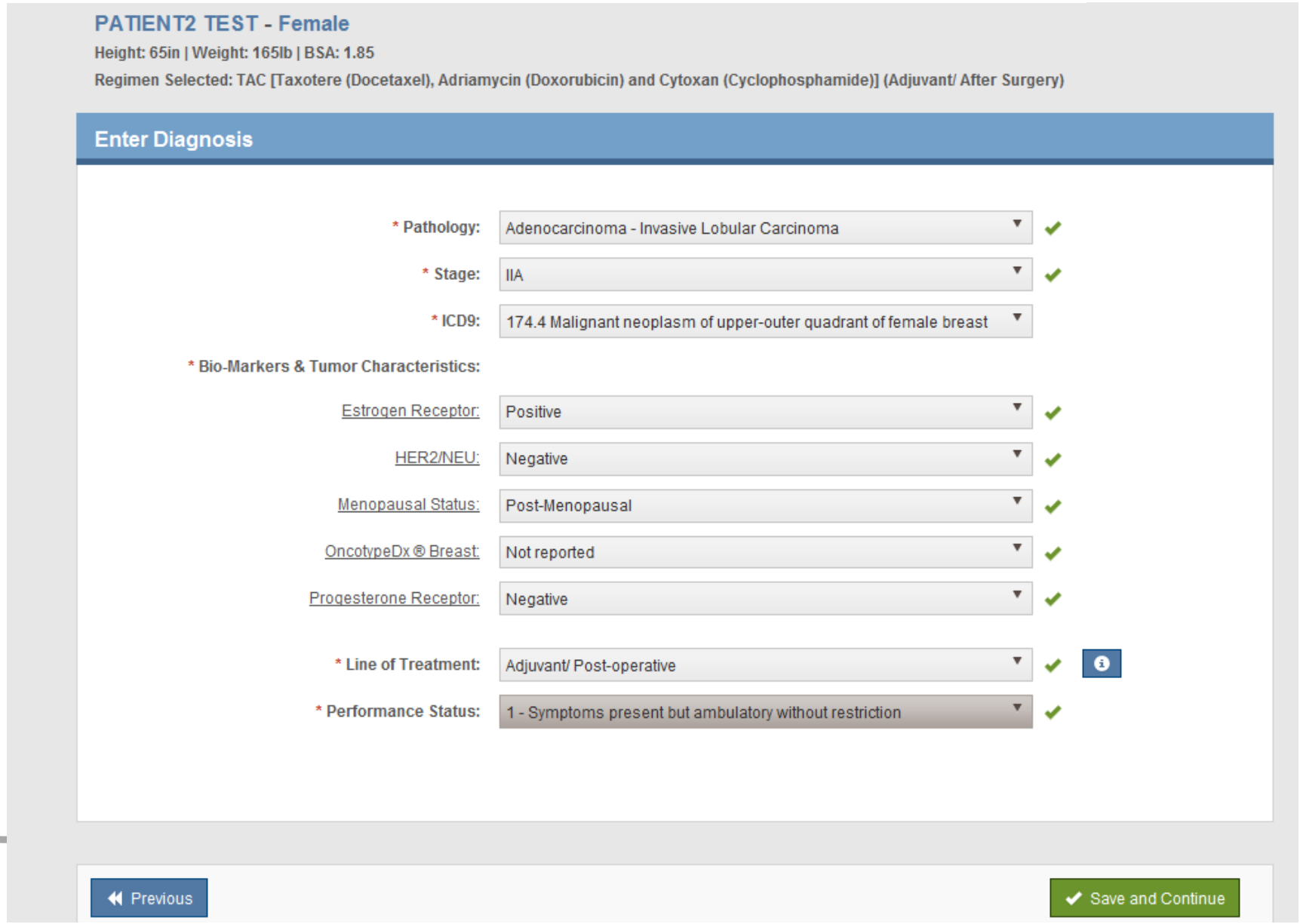
Pathways are a subset of regimens supported by evidence and clinical guidelines and aligned with health plan medical policies. Pathways are intended to be applicable for 80%-90% of patients and are selected based on:

1. Clinical benefit (efficacy)
2. Side effects/toxicities *(especially those leading to hospitalizations & impact quality of life)*
3. Strength of national guideline recommendations
4. Cost of regimens

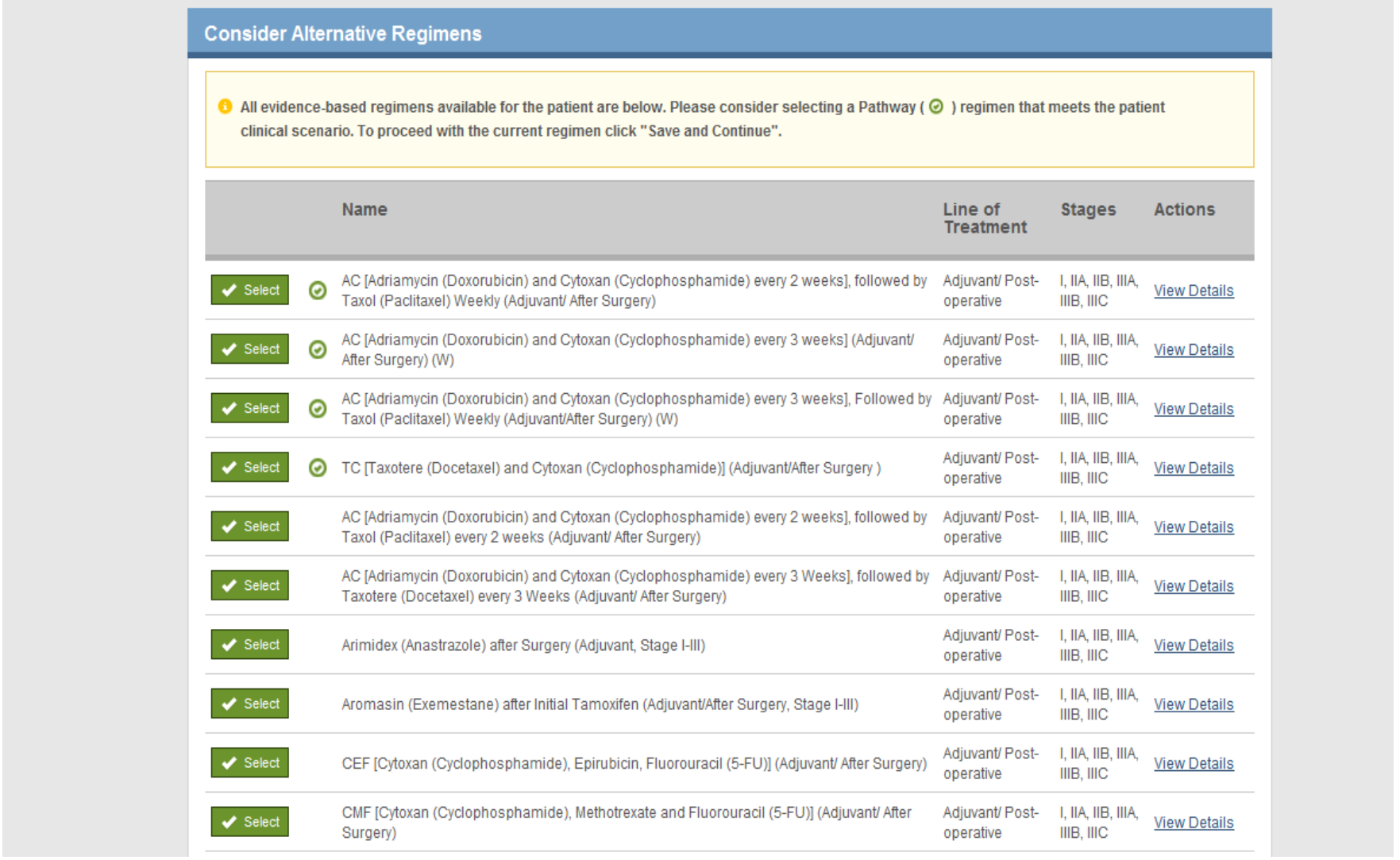
WellPoint Pathways are developed through a rigorous evidence based medicine process and reviewed by external advisors.

WellPoint's external advisors include ~10 oncologists from geographically diverse academic and community oncology practices who have specific interest in quality of care; 4 are affiliated with NCI-designated cancer centers, 6 with Blue Centers of Distinction, and 6 have served on national committees for organizations such as NQF, ASCO, and IOM to improve the quality of cancer care.

Pathways are specific to tumor type and biomarkers and patient characteristics



Decision-support based on biomarkers



Consider Alternative Regimens

All evidence-based regimens available for the patient are below. Please consider selecting a Pathway ( ) regimen that meets the patient clinical scenario. To proceed with the current regimen click "Save and Continue".

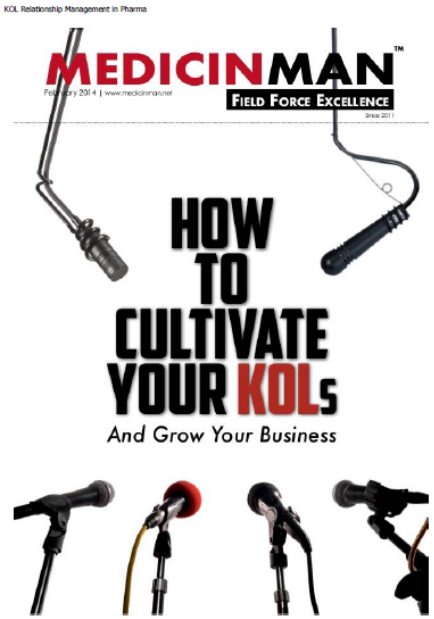
	Name	Line of Treatment	Stages	Actions
Select	AC [Adriamycin (Doxorubicin) and Cytoxan (Cyclophosphamide) every 2 weeks], followed by Taxol (Paclitaxel) Weekly (Adjuvant/ After Surgery)	Adjuvant/ Post-operative	I, IIA, IIB, IIIA, IIIB, IIIC	View Details
Select	AC [Adriamycin (Doxorubicin) and Cytoxan (Cyclophosphamide) every 3 weeks] (Adjuvant/ After Surgery) (W)	Adjuvant/ Post-operative	I, IIA, IIB, IIIA, IIIB, IIIC	View Details
Select	AC [Adriamycin (Doxorubicin) and Cytoxan (Cyclophosphamide) every 3 weeks], Followed by Taxol (Paclitaxel) Weekly (Adjuvant/After Surgery) (W)	Adjuvant/ Post-operative	I, IIA, IIB, IIIA, IIIB, IIIC	View Details
Select	TC [Taxotere (Docetaxel) and Cytoxan (Cyclophosphamide)] (Adjuvant/After Surgery)	Adjuvant/ Post-operative	I, IIA, IIB, IIIA, IIIB, IIIC	View Details
Select	AC [Adriamycin (Doxorubicin) and Cytoxan (Cyclophosphamide) every 2 weeks], followed by Taxol (Paclitaxel) every 2 weeks (Adjuvant/ After Surgery)	Adjuvant/ Post-operative	I, IIA, IIB, IIIA, IIIB, IIIC	View Details
Select	AC [Adriamycin (Doxorubicin) and Cytoxan (Cyclophosphamide) every 3 Weeks], followed by Taxotere (Docetaxel) every 3 Weeks (Adjuvant/ After Surgery)	Adjuvant/ Post-operative	I, IIA, IIB, IIIA, IIIB, IIIC	View Details
Select	Arimidex (Anastrazole) after Surgery (Adjuvant, Stage I-III)	Adjuvant/ Post-operative	I, IIA, IIB, IIIA, IIIB, IIIC	View Details
Select	Aromasin (Exemestane) after Initial Tamoxifen (Adjuvant/After Surgery, Stage I-III)	Adjuvant/ Post-operative	I, IIA, IIB, IIIA, IIIB, IIIC	View Details
Select	CEF [Cytoxan (Cyclophosphamide), Epirubicin, Fluorouracil (5-FU)] (Adjuvant/ After Surgery)	Adjuvant/ Post-operative	I, IIA, IIB, IIIA, IIIB, IIIC	View Details
Select	CMF [Cytoxan (Cyclophosphamide), Methotrexate and Fluorouracil (5-FU)] (Adjuvant/ After Surgery)	Adjuvant/ Post-operative	I, IIA, IIB, IIIA, IIIB, IIIC	View Details

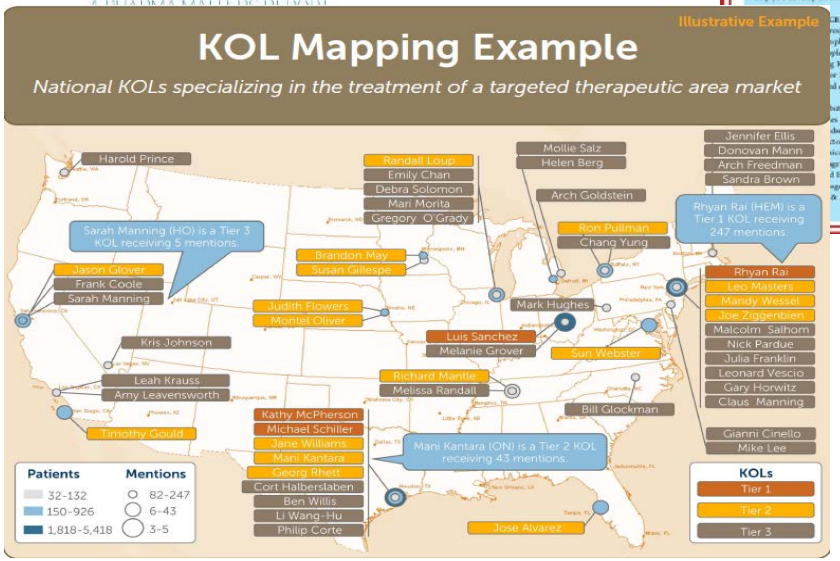
Note: AIM Specialty Health maintains the confidentiality of all protected health information. All data displayed is fictional and any resemblance to real persons is purely coincidental.

Transparency varies across pathway programs

	Methodology	Governance	Committee members named	Pathways publicly available
McKesson/ NCCN/USON	✓	✓	✓	✗
Cardinal Health/P4	✗	✗	✗	✗
New Century	✗	✗	✗	✗
Via	✗	✗	✓	✗
WellPoint	✓	✓	✗	✓

Pharma KOL strategies necessitate “advisor protection program”





KOL STRATEGY AND MANAGEMENT

Our Model: a Quality Initiative

- WellPoint's Cancer Care Quality Program provides a framework **for promoting high quality cancer care**
- Oncologists participating in the Cancer Care Quality Program will receive **additional payment** for treatment planning and care coordination when they select a treatment regimen that is on Pathway
- Web-based platform with decision-support for Quality Initiative also improves efficiency of review against health plan clinical policies and **decreases administrative burden** for practices

www.cancercarequalityprogram.com

Additional payments for treatment planning and care coordination support cost-effective care

Enhanced reimbursement for treatment planning and care coordination may be available to participating providers when member is registered with the Cancer Care Quality Program and treatment regimen is on pathway – **therapies that are clinically effective, have favorable side-effect profile and cost-effective**

$350 monthly neutralizes the wide variation in revenue associated with treatment regimens and aligns reimbursement with intrinsic motivation to provide **patient-centered quality care**

Eligibility for S-code billing is triggered through AIM ***Provider****Portal* when practice selects a regimen that aligns with WellPoint Cancer Treatment Pathways

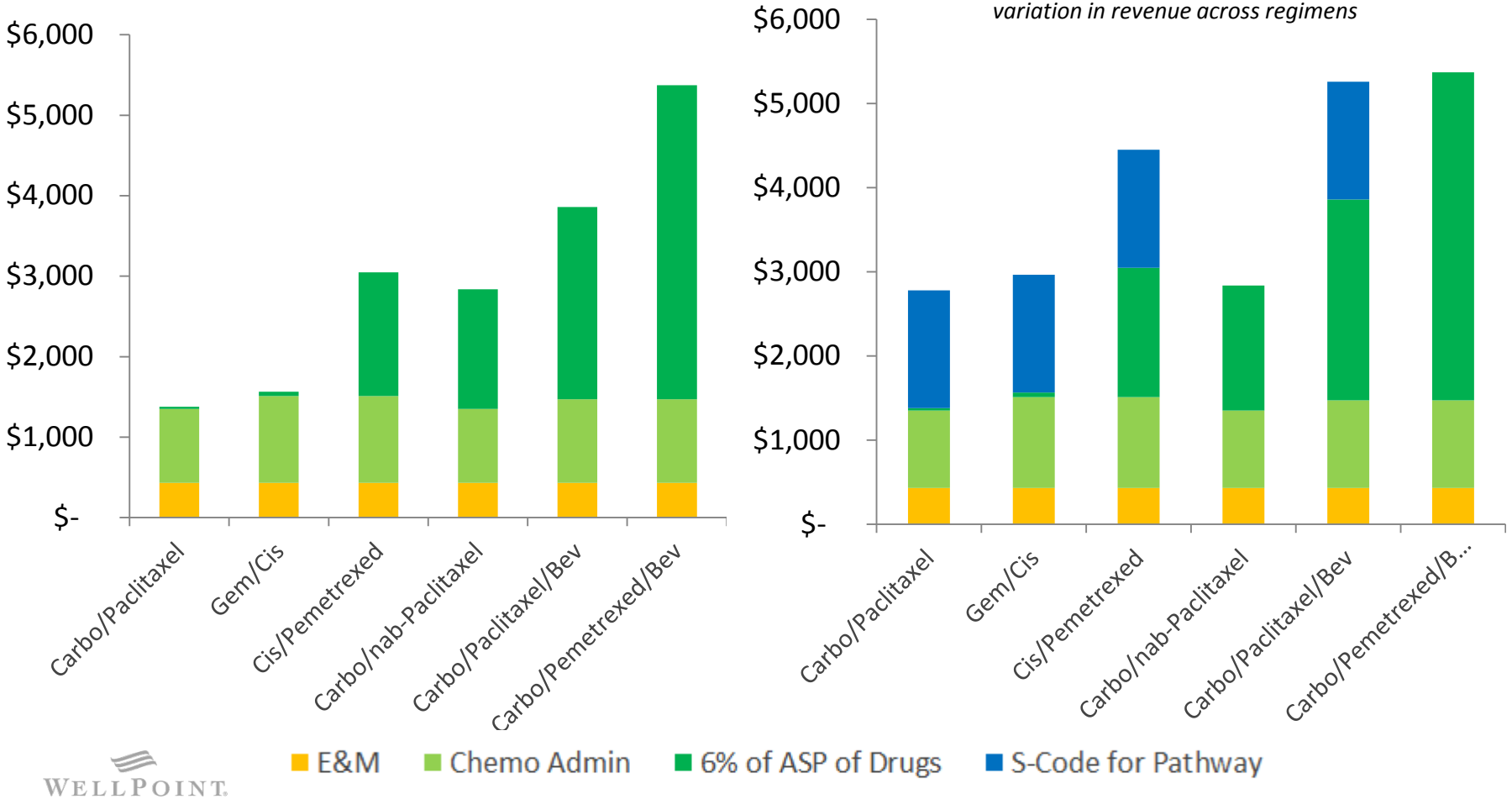
Impact of enhanced reimbursement and support for Pathways

Mean Practice Revenue across regimens

without S code $ 3,010 (SD $1,488)

with S code $ 3,943 (SD $1,230)

S code reimbursement decreases variation in revenue across regimens



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Summary

- Guidelines are very broad and often do not provide enough guidance to select most effective treatment
- WellPoint's Cancer Treatment Pathways focus on treatment options that are clinically effective, have favorable side-effect profiles, and are cost-effective
- Pathways must be tailored to biomarkers and other key patient characteristics