Hematology/Oncology Pharmacy Association

Justifying New Oncology Pharmacist Positions

Robert Mancini, PharmD, BCOP
Oncology Pharmacist: Oral Chemotherapy, Infusion & Supportive Care
St. Luke's Mountain States Tumor Institute

Faculty Disclosures

- I will not be discussing off-label uses of any medications
- I am on the speaker's bureau for Millenium Pharmaceuticals and am a paid consultant for GlaxoSmithKline

Objectives

- Describe the roles that pharmacists can play in the care of cancer patients.
- Review the data in the literature regarding cost-savings and cost-benefits of pharmacist utility in the healthcare system.
- Identify roles that can be justified in your institutions based on real or perceived financial benefits.

Outline

- Review roles of oncology pharmacists in practice today
- Discuss impact oncology pharmacists can have and translate that into dollar amounts
- Show examples of how pharmacists have saved money
- Review how MSTI created an additional FTE for Oral Chemotherapy Management

Which of the following roles have oncology pharmacists filled in the field of cancer care?

A) Inpatient Pharmacist
B) Infusion Therapy Management
C) Oral Chemotherapy Management
D) Research Pharmacist
E) All of the Above

Roles for Oncology Pharmacists

- Administration
  - Oversight for operations and budget for clinics with multiple sites
  - Managing drug costs
- Infusion Pharmacy
  - Oversight for sterile compounding and admixture of hazardous drugs and premedications
  - Antiemetic, premedication, monitoring protocol development and adherence

Mancini R. *Onc Pract Manage.* March 2012;2(2): 16-19

Roles for Oncology Pharmacists

- Inpatient Oncology 
  - Comprehensive management of acute conditions both related and unrelated to primary cancers
- Research 
  - Managing numerous phases of clinical trials including protocol management and drug accountability
- Information Technology 
  - Assisting with mediation formulary management and care plans in electronic medical records

Mancini R. *Onc Pract Manage.* March 2012;2(2): 16-19

Roles for Oncology Pharmacists

- Oral Chemotherapy
  - Dispensing, managing and adjusting oral chemotherapy medications in collaboration with primary oncologists
- Supportive Care/Medication Therapy Management
  - Assisting with medication and symptom management in a clinic setting

ASCO. *J Oncol Pract.* July 2008;4(4): 172-4.
Mancini R. *Onc Pract Manage.* March 2012;2(2): 16-19

Which of the following pathways is easiest to justify additional FTEs for pharmacists?

A) Cost-Savings
B) Increased Revenue
C) Physician Support
D) Accreditation Requirement
E) None of the above

Pathways of Justification

- Cost-Savings
  - Pharmacists cost money to employ
  - Try and prove they save more money than they cost
- Increased Revenue
  - Can the pharmacy bring increased income to the institution
- Physician Support
  - Lets be honest
  - They say jump, we say how high

Cost-Savings

- Community Oncology Clinic
  - Clinical interventions reviewed retrospectively for 2 year period
    - Drug-related: adverse events, medication reconciliation, & dosing
    - Consultative: patient education, patient visits, drug info
    - Recommendations universally accepted
  - Chemotherapy cost-savings: $210,000/yr
    - Preventing drug waste, reducing doses when indicated and rounding to vial sizes
  - Colleague satisfaction 100% (agree or better)

Ruder AD, et al. *J Oncol Pharm Pract.* 2010;17(4): 425-32

Cost-Savings

- Community Hospital Setting
  - Created interdisciplinary team to decrease errors and improve efficiency
    - Created order forms, collaborative practice agreements, protocols
  - Reduced errors 45% post-implementation
  - Chemotherapy waste prevention: $120,000 annual cost savings yearly over first 5 years

Chung C, et al. *Am J Health-Syst Pharm.* 2011;68: 1741-1747

Other Studies of Cost Saving

- Dose Rounding
  - Rounded to 10% of calculated dose
  - Reduced wastage 42%
  - Potential savings of $24,434 in 3 months
- CINV Cost-Reducing Algorithms
  - Multidisciplinary team created algorithm for CINV in an academic medical center
  - Patient outcomes just as good post implementation
  - Cost avoidance of $205,000 in first year alone

Winger BJ, et al. *J Oncol Pharm Practice*.2010;17(3): 246-251
Berard CM & Mahoney CD. *Am J Health-Syst Pharm*. 1995;52(17): 1879-85

Increased Revenue

- Oral Chemotherapy
  - Created a new program which included dispensing from health system pharmacy
  - Increased retained scripts from 25% to 85%
  - Revenue Benefit
    - Operating costs: $230,000 annually
    - Revenue: $2.4 million annually
  - Other benefits
    - Reduced non-fulfillment due to cost to 1%
    - Reduced medication write-off to <1%

Drenker K, et al. *J Hematol Oncol Pharm*. 2012;2(2): 42-45
Mancini R, et al. *J Hematol Oncol Pharm*. 2011;1(2): 23-30

Increased Revenue

- Medication Therapy Management
  - 239 MTM visits at an ambulatory oncology clinic in 3 month time period
  - Median of 20 min (Range 15-127) face-to-face time with patients, 18 min (range 5-90) for documentation
  - Majority of patients were seen for chemo teaching & management, post-BMT or symptom mgmt
  - No claims rejected, but reimbursement ranged from 47-79% of billed rate (exact $ amt not specified)
  - Increase visibility also justifies extra time

Watkins JL, et al. *J Am Pharm Assoc*. 2012;52 (2): 170-174.

Increased Revenue

- Medication Therapy Management
  - MTM Billing Codes: 99605, 99606, 99607
    - 99211-99215 (Evaluation & Management Codes)
    - Only for MediCare, can not bill on same day as provider visit
    - Pharmacist or Pharmacy must have NPI number
    - May need to negotiate rates with private payors
  - Lewin Report on MTM
    - APhA Report on standard rates of reimbursement for MTM by pharmacists
    - Must charge approximately $2-3/min to make it profitable ($1-2/min to cover costs)
    - Provides recommendations on how to implement MTM services

DaVanzo J, et al. *The Lewin Report*. May 17, 2005

Other Considerations

- Time saved for other disciplines
  - Prior authorizations
  - REMS paperwork
  - Protocol Management
- Inventory Management
  - Money sitting on the shelf
  - Extended stability data
  - Saving one wasted dose = $$$$
- Meeting accreditation standards
  - JCAHO National Patient Safety Goal- Medication Reconciliation
  - ASHP Statement in Medication Reconciliation
    - Pharm Techs reduce potential errors 82%

Ostriker, S. *J Oncol Pharm Pract*. 2010;17(4): 425-32
ASHP Council on Pharmacy Practice. *Am J Health-Syst Pharm*. 2013;70: 453-6

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Creating an Oral Chemo Program

Which of the following types of analysis can help you determine justification of an extra pharmacist FTE?

A) Cost-Benefit
B) Cost-Effectiveness
C) Break-Even Point Analysis
D) Cost-Utility
E) All of the Above

Analyze Current State

- Number of patients seen
- Number or percentage on oral chemo
- What drugs
- Cost and reimbursement of those drugs
- Percentage of referrals expected

Perform Pilot for Proof of Concept

- Requirements to start
  - Staff to perform pilot (think residents!)
  - Must be a full time pilot (40 hrs/wk x2-4 weeks)
  - Understand that it may take off fast
- Validate & Refine
  - Develop workload expectations
  - Determine space and equipment needs
  - Determine staffing needs

Oral Chemo Break Even Point (BEP) Analysis*

Costs	Dollar Amount
Salaries	$170,000
Non-Salary Overhead	$5,000

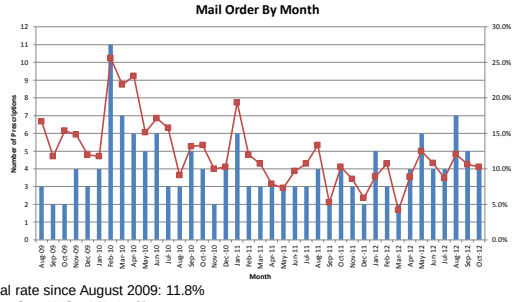
Prescription Parameter	Value
Number of Rx's	422
Avg Rx Price	$3,217
Avg Rx Markup	$1,883
Bad Debt Percent	3.00%

Assumptions	
Pts on Active Tx	844
% Pts on Oral Chemo	25%
% Referrals to OC	50%
Rxs & Rf/pt/yr	4
Yearly Rx & Rf for BEP	82

Annualized from Pilot	
Gross Revenue	$1,357,574
Cost of Goods Sold	$562,948
Fixed Costs	$175,000
Bad Debt	$40,727
Net Revenue	$619,626

*Data produced from MSTI residency project data. Internal data only.

The Mail Order "Issue"*



Total rate since August 2009: 11.8%
Rate Oct '11-Oct '12: 9.5%

*Data produced from MSTI residency project data. Internal data only.

Create a Business Plan

- Resources needed
  - Started with 1 pharmacist and 0.5 tech biller
  - Now have 1.2 pharmacists and 2 full time techs
    - Workload now requires 2 FTE Pharmacists
- Quality Measures
  - Patient Satisfaction ↑↑
  - System Improvement (staff satisfaction, etc) ↑
  - Patient Safety ↑↑↑
  - Financial Accountability ↑↑↑↑

Patient Satisfaction*

Question	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Initial contact by pharmacist	**87.5% (n=56)**	**12.5% (n=8)**	0% (n=0)	0% (n=0)	0% (n=0)
Explanation of insurance/billing	**70.31% (n=45)**	**23.44% (n=15)**	4.69% (n=3)	1.56% (n=1)	0% (n=0)
Overall education	**75% (n=48)**	**23.44% (n=15)**	1.56% (n=1)	0% (n=0)	0% (n=0)
Education on safe handling and disposal	**57.81% (n=37)**	**28.13% (n=18)**	12.5% (n=8)	1.56% (n=1)	0% (n=0)
Education on how to take medications and side effects expected	**73.44% (n=47)**	**25% (n=16)**	1.56% (n=1)	0% (n=0)	0% (n=0)
Education on who to contact with questions	**68.75% (n=44)**	**25% (n=16)**	4.69% (n=3)	1.56% (n=1)	0% (n=0)

N=64

*Data produced from MSTI residency project data. Internal data only.

Justify the resources

- Cost-Savings
  - Less than 1% write offs
  - Over $1 million in free drug from MFG
  - ~$250,000/yr in patient assistance funds
  - Reduction in nonfulfillment rates
  - Safety Measures
- Increased revenue
  - Cost of Resources (FTE, office supplies, etc): ~$300,000
  - Approximate Revenue: on track to $8 million annually
- Outside Audits (REMS, insurance, etc)
- Continual feedback/reporting to Admin

Questions?

"If you're stumped, why not write an illegible prescription and hope the pharmacist comes up with something?"

References

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