



# How to Develop a Business Plan for Clinical Pharmacy Services

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## Disclosures



- Nothing to disclose





## Session Goals

- To present key considerations in the economic justification of new or expanded clinical pharmacy services (CPS).
- To describe the core elements of a business plan for CPS, and the steps necessary to conduct business planning.
- To provide examples of business plans, including the financial and return on investment analyses important to a CPS business plan.
- To review important considerations for successfully presenting the business plan to financial decision makers.



## Self-Assessment Question #1

For every \$1 invested in a CPS, one can expect \$4 to \$5 in benefit to be produced.





## Self-Assessment Question #2

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The purpose of “pre-planning” in the business plan process is to generate enough information to make a decision about implementing the proposed CPS.



## Outline

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- Part 1: Economic Justification of CPS
  - Conceptual approach to economic evaluation of CPS
  - Practical approaches for justification of a CPS
  - Example
- Part 2: Business Planning for CPS
  - Overview and core elements of a business plan
  - The process of business planning
  - How to convince decision-makers





## Resources

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- How to Develop a Business Plan for Pharmacy Services.
  - Publisher: American College of Clinical Pharmacy (ACCP.org)



FAKE NEWS!



## Resources

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- Schumock & Donnelly. Strategic Planning in Pharmacy Organizations (Chapter 4). In Zgarrick et al. Pharmacy Management. 4<sup>th</sup> Edition. McGraw Hill Education: New York. 2016
- Schumock et al. Business Planning for Pharmacy Programs (Chapter 5). In Zgarrick et al. Pharmacy Management. 4<sup>th</sup> Edition. McGraw Hill Education: New York. 2016





## Perspective



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- Hospital pharmacy based CPS
  - Applicable to pharmacy services in other settings (not just hospitals)
  - Applicable to any pharmacy service (not just CPS)
- US healthcare system (or lack thereof)
  - Applicable regardless of system of payment (not just one that doesn't work)



## Audience Participation

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- What CPS are you considering implementing in your institution?
  - Setting (inpatient, clinic, etc.)
  - Patient population
  - Service provided





## Part 1: Economic Justification of CPS

- **Conceptual approach to economic evaluation of CPS**
- Practical approaches for justification of a CPS
- Example



## How to Define the Value of CPS?

- The value of the pharmacist in product-related functions has been closely tied to the price of the prescription.
- However, pharmacists clinical service have been more difficult to put value on.
- Yet we know that CPS...
  - Improve outcomes
  - Save money
  - Can generate revenue





## How to Define the Value of CPS?

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- Value = Quality ÷ Cost
  - Where Quality = Outcomes
  - We can measure economic, clinical, or humanistic outcomes

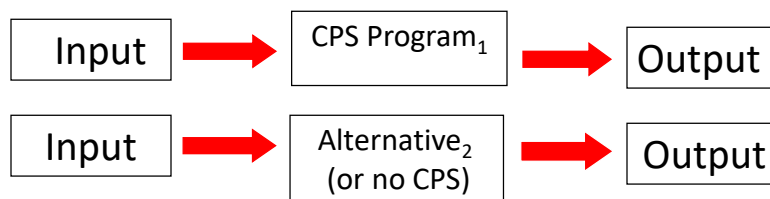


Thus, the value of clinical pharmacy is defined by ability to improve clinical, humanistic, and/or economic outcomes, given the cost to provide such services.



## How to Assess Value of CPS

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### Measure:

#### **COSTS (resources consumed)**

- Cost of providing service

Units = \$ or other monetary unit

### Measure:

#### **CONSEQUENCES (outcomes, effect)**

- Clinical outcome
- Humanistic outcome
- Economic outcome

Units = depends on outcome





## Metrics

- “Cost-Benefit” Analysis (where outcome is measured in dollars)
  - Compare average benefit-to-cost ratios:  $\$B_1:\$C_1$  versus  $\$B_2:\$C_2$
  - Incremental benefit-to-cost ratio:  $\frac{(\$Benefit_1 - \$Benefit_2)}{(\$Cost_1 - \$Cost_2)}$
  - Net benefit:  $(\$Benefit_1 - \$Benefit_2) - (\$Cost_1 - \$Cost_2)$
  - Return on investment:  $\frac{(\$Benefit_1 - \$Benefit_2) - (\$Cost_1 - \$Cost_2)}{(\$Cost_1 - \$Cost_2)}$



## Economic Outcomes of CPS

	Author	Type of Study	Time Period
★	Schumock, et al. 1996	Systematic Review (ACCP)	1988–1995
★	Schumock, et al. 2003	Systematic Review (ACCP)	1996–2000
★	Schumock, et al. 2009	Systematic Review (ACCP)	2001–2005
	Chisholm-Burns et al, 2010	Systematic Review	Up to 2009
	Chisholm-Burns et al, 2010	Systematic Review and Meta-Analyses	Up to 2009
★	Touchette, et al. 2014	Systematic Review (ACCP)	2006–2010





## Benefit-to-Cost Ratio

Benefit-to-Cost Ratios (pooled)

(Financial benefit per dollar invested, \$benefit :\$1)

**BOTTOM LINE:**  
For every \$1 invested  
in CPS the benefit is  
between \$4 and \$5.

	1988-1995 ★	1996-2000 ★	2001-2005 ★	2006-2010 ★
Lowest	1.1:1	1.7:1	1:1	1.1:1
Highest	75.8:1	17:1	34.6:1	25.9:1
Median	4.1:1	4.7:1	4.8:1	NR
Mean	16.7:1	5.5:1	8:1	NR



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## Part 1: Economic Justification of CPS

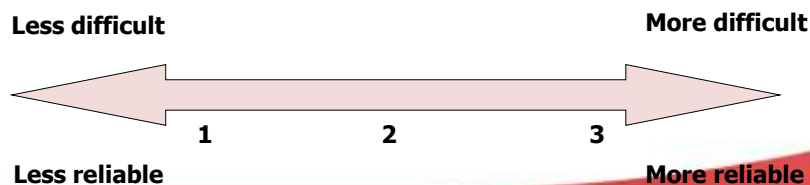
- Conceptual approach to economic evaluation of CPS
- Selecting a CPS to implement
- **Practical approaches for justification of a CPS**
- Example





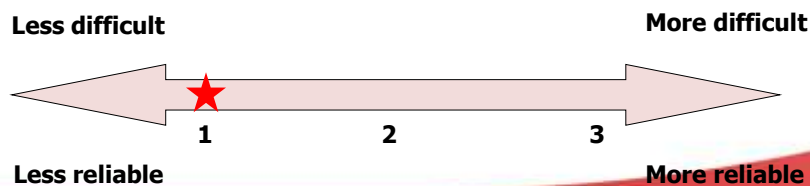
## Practical Approaches to Justify CPS

- Possible strategies
  1. Interpret/generalize from other studies
  2. Economic modeling/projection
  3. Prospective evaluation
- Advantages and disadvantages exist



## Practical Approaches to Justify CPS

- Possible strategies
  - 1. Interpret/generalize from other studies**
  2. Economic modeling/projection
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- Advantages and disadvantages exist





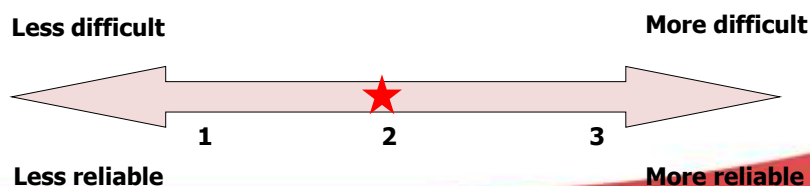
## Strategy 1: Generalize from Published Studies

- Advantages
  - Quick
  - Inexpensive
  - Peer reviewed
  - Variety of services and results are available
  - Information available before implementation
- Disadvantages
  - External validity
  - Variations in quality of published studies
  - Applicable studies may not be available for the service you are planning
  - Available studies may not be convincing to decision makers



## Practical Approaches to Justify CPS

- Possible strategies
  1. Interpret/generalize from other studies
  - 2. Economic modeling/projection**
  3. Prospective evaluation
- Advantages and disadvantages exist





## Modeling/Projection



- Combine evidence from literature with own internal estimates (costs)
  - Costs
  - Benefits (in financial terms, if possible)
- Determine when/if program will breakeven
- Incorporate sensitivity analysis in projections (what if...?)
  - Patients miss appointments
  - Pharmacist wage increases/other cost increases over time



## Strategy 2: Modeling/Projections



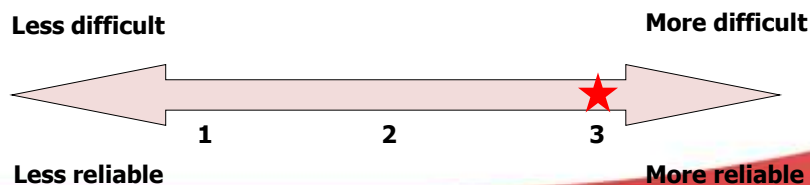
- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Advantages               <ul style="list-style-type: none"> <li>– Inexpensive</li> <li>– Quick</li> <li>– Yields organization specific results</li> <li>– Sensitivity analysis can be used to confirm results</li> <li>– Data collection is unobtrusive</li> <li>– Can be conducted pre-implementation</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Disadvantages               <ul style="list-style-type: none"> <li>– Results depend on assumptions</li> <li>– Potential for bias</li> <li>– Decision makers may not accept results of projection</li> </ul> </li> </ul> |
|--|--|





## Practical Approaches to Justify CPS

- Possible strategies
  1. Interpret/generalize from other studies
  2. Economic modeling/projection
  - 3. Prospective evaluation**
- Advantages and disadvantages exist



## Strategy 3: Prospective Evaluation

- Implement program (perhaps on a trial basis)
- Measure actual costs
- Measure actual benefits
- Compare to “no service” or next best opportunity





## Strategy 3: Prospective Evaluation



- Advantages
  - Flexible
  - Organization specific data
  - High internal validity (when appropriately designed)
  - Reflects “usual care” or effectiveness
  - More likely to be accepted by decision makers
- Disadvantages
  - Expensive (time and money)
  - Design challenges (control/randomization may not be feasible)
  - Potential for selection bias
  - Need adequate sample size
  - Need resources and authorization to start



## Part 1: Economic Justification of CPS

- Conceptual approach to economic evaluation of CPS
- Selecting a CPS to implement
- Practical approaches for justification of a CPS
- **Example**





## Example

Schumock et al. Am J Health-System Pharm 1999;56:1945-9.



- Implementation of CPS in a community hospital.
- Searched for literature describing similar programs then estimated costs and benefits based on literature found. (strategy #1)
- Implemented program and evaluated prospectively. (strategy #3)



## Strategy 1: Literature Generalization



- Conducted literature search for articles describing CPS in community hospitals.
- Compared hospital size, patient population.
- Used results of literature found to estimate number of clinical pharmacists and nature of services to provide.
- Estimated financial benefit.

Schumock et al. AJHP 1999;56:1945-9





## Literature Generalization

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### Cost-Benefit Analysis of Clinical Pharmacy Re-engineering Program<sup>a</sup>

Variable	Proposed <sup>b</sup>	Actual <sup>c</sup>
Cost (\$)	245,883	140,505
Benefit (\$)	525,870	358,056
Benefit-cost ratio	2.14:1	2.55:1
Net benefit (\$)	279,987	217,551
% Return on investment	114	155

<sup>a</sup>U.S. dollars.

<sup>b</sup>Based on original proposal and 3.5 full-time-equivalent clinical pharmacists.

<sup>c</sup>Approved and implemented with 2.0 full-time-equivalent clinical pharmacists.



## Implementation

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### Timetable for Implementation of Clinical Pharmacy Re-engineering Program

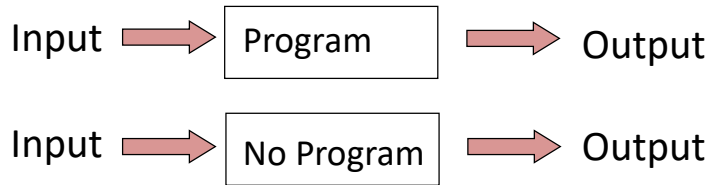
Program Characteristic	Year 1	Year 2	Year 3
Services added	Alternative therapeutic options and therapeutic interchange, drug information service, i.v. to oral conversion, renal dosing program, rounds on medical unit, rounds on surgical-oncology unit	Expansion to ambulatory care areas, care plan development, advanced patient counseling, rounds on intensive care unit	Individual therapy design by specialty or disease, rounds in all areas of the hospital
Skill development	Fair	Moderate	High
Projected net savings (\$)	192,500	275,000	358,000







## Strategy 3: Prospective Evaluation



Cost of providing program  
 -Salaries/benefits \$135,505  
 -Indirect \$5,000  
 -Total \$140,505

Financial impact of Program  
 -Drug\$/patient day ↓\$7  
 -Drug \$ avoided \$358,056

Net \$ avoided \$217,551  
 B:C Ratio 2.55:1



## Prospective Evaluation

**Cost-Benefit Analysis of Clinical Pharmacy Re-engineering Program<sup>a</sup>**

Variable	Proposed <sup>b</sup>	Actual <sup>c</sup>
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## Conclusion Part 1



- Methods exist to define and assess the value of CPS.
- Previous literature supports economic, clinical, and humanistic outcomes of CPS.
- Select CPS to implement that are practical and have evidence of impact.
- Strategies exist for economic justification of CPS.



## Part 2: Business Planning for CPS

- **Overview**
- The process of business planning
- How to convince decision-makers





## Definitions and Types of Planning

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- Planning is the purposeful efforts taken by an organization (or individual) to maximize future success.
- One of four key functions of managers (along with organizing, leading, and controlling).



## Types of Planning

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- Strategic planning
- Operational planning
- Organizational planning
- Resource planning
- Contingency planning
- Business planning



See Chapter 4





See Chapter 1



## Steps in the Planning Process

1. Define the purpose of the organization and of the planning effort
2. Assess the present situation
3. Establish future goals
4. Identify strategies to reach future goals
5. Establish interim objectives that ensure progress toward goals
6. Define responsibilities and timelines for each objective
7. Write and communicate the plan
8. Monitor progress toward meeting goals and objectives



## Objective of Business Planning

- To propose/plan a new business (service)
- To propose/plan expanding an existing business (service)
- To propose/plan to continue (or not) an existing business (service)



# Steps in the Business Planning Process

Table 2.2. Steps in the Business Planning Process

Step	Activity	Chapter
1	Exploring and developing the business concept (sometimes called "preplanning")	3
2	Evaluating the market and competitors	4
3	Planning the operations and resources required	5
4	Assessing regulatory requirements and standards of practice	6
5	Developing a promotional program	7
6	Developing financial projections	8
7	Planning for implementation	9
8	Writing and presenting the business plan	10
9	Evaluating the success of the program after implementation	6 and 9



See Chapter 2



## Example Format

(Note: format may depend on scope and purpose)

- Executive Summary
- Background and Description
- Market Analysis
- Regulatory/Legal Consideration
- Operational Structure and Processes
- Marketing Strategy
- Financial Projections
- Milestones, Schedule, Action Plan
- Exit Strategy
- Supportive Appendix Documents





## Part 2: Business Planning for CPS

- Overview
- **The process of business planning**
- How to convince decision-makers



## Not All Steps Covered Today

Table 2.2. Steps in the Business Planning Process

Step	Activity	Chapter
✓ 1	Exploring and developing the business concept (sometimes called "preplanning")	3
✓ 2	Evaluating the market and competitors	4
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5	Developing a promotional program	7
✓ 6	Developing financial projections	8
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## Covered in Book

- Purpose
- How to conduct planning for that section
  - Questions or issues to consider
- Key points to include in plan
- Print and online resources
  - Workbook/exercise questions
  - Business plan template
  - Example business plans
  - Financial spreadsheet



## Steps in the Business Planning Process

Table 2.2. Steps in the Business Planning Process

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See Chapter 3





## Exploring the Business Concept

- How do you decide if the business idea you have is a good one? (i.e., Is it worth even developing a business plan)
- Conduct a “preliminary” assessment. At minimum this includes:
  - Literature search
  - Back-of-the-envelope calculation of potential “profit”
  - Usually includes some initial assessment of the market (gather information from stakeholders)



## Exploring the Business Concept

- Conduct “Back-of-the-Envelope” Financial Assessment
  - Consider the economic model (revenue or savings).
  - Estimate the total amount of revenue/savings (for a given time period) = “benefit”.
  - Consider the number of pharmacists needed to provide the service and if there are any other major costs.
  - Estimate the total costs (for same time period).
  - Consider the difference between revenue and costs.







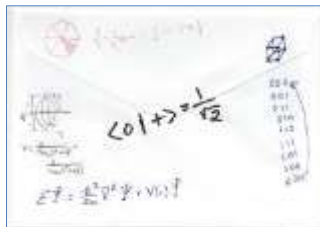
## Audience Participation

- How does the CPS you would like to implement create value?
  - Improve outcomes
  - Save money
  - Can generate revenue



## Audience Participation

- For the CPS you would like to propose, would pre-planning provide sufficient evidence to move forward with a complete business plan?





## Exploring the Business Concept

- Based on Pre-Planning you make a decision to pursue further by developing a full business plan.



## Example Format

(Note: format may depend on scope and purpose)

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- Supportive Appendix Documents





## Covered in Each Section

- Purpose
- How to conduct planning
  - Questions to consider
- Key points to include in plan



## Purpose and Importance

- Purpose: to understand the need for and mission of the service, and how it fits within the organization.
- Important for setting the stage and defining scope of program for the audience.





## Key Points



1. Define the customer need
2. Describe the service opportunity
3. Program mission
4. Describe the organization and how program fits within it



## 1. Define the Customer Need



- What is the disease/problem/need?
- What are the complications of the disease/problem/need?
- How does it impact health and quality of life?
- What are the financial impacts to patient, society?



Establish rationale for the proposed business





## 2. Describe Service Opportunity

- How can people with the disease/problem be helped?
- How does the proposed service do this?
- Why is the pharmacist the best professional to fill this need?



## 3. Mission Statement

- What is the mission statement for the service?
- What are the strategic goals of the organization (broader organization)?
- How will the proposed program help contribute to achieving these goals?





## Mission Statement

- Mission = purpose of the company or service
- The mission statement defines what the company does or is, or at least should be, in the present.
- Example: Antibiotic Stewardship Program – “to ensure optimal outcomes of antibiotics while reducing unnecessary use and costs.”



## Audience Participation

- What would be a good mission statement for the CPS you would like to propose?



## UIC 4. Describe the Organization (pharmacy) and How Program Fits

- Is the proposed program a new service of an existing organization, or is it a start-up?
- If within an existing organization, how does it fit organizationally?
- If start-up, what type of organization will it be? (type, profit status, ownership, etc.)
- Where is it located? (physically, organizationally)



## UIC Steps in the Business Planning Process

Table 2.2. Steps in the Business Planning Process

Step	Activity	Chapter
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See Chapter 4





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## Purpose and Importance

- Purpose: to understand the composition, size and trends in the market and customers.
- Important for developing estimates of revenue (or economic benefit) and of staffing/resources need to provide the service.
- Important for understanding the potential future growth of the program.







## Key Points

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1. Who are the customers?
2. Who are the stakeholders?
3. Market description
4. Who are the competitors?



## 1. Who is the Customers?

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- Traditional definition: A customer is a person or group who purchases goods or services.
- May or not be the end user.

- ☒ Purchase
- ☒ Order
- ☒ Consume





## 2. Who is a Stakeholder?

- Traditional definition: A person or group that influences the purchase decision.
- For CPS might include:
  - Physicians
  - Family members
  - Other healthcare professionals
  - Payers (insurance, government)



## 3. Market Description

- Geographic/demographic description
- What are the market trends?
- List the market segments
- What market segment(s) comprise the target market?
- What is the size of the target market? # of patients





## Geographic/Demographic Description

- Population size and demographics (obtain from census data and government reports, internal data)
  - age, race, income, education, etc.
  - trends (growing?)
- Epidemiological statistics (obtain from government reports and literature)
  - incidence, prevalence



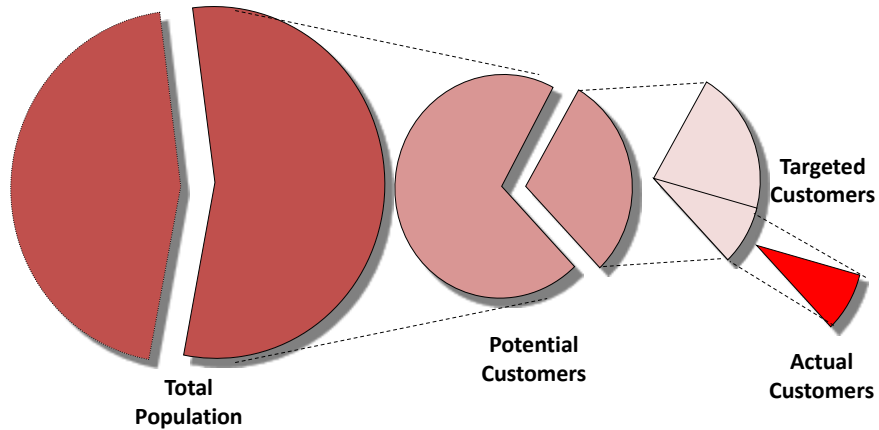
## Market Segments and Target

- A market segment is a group of customers based on similar characteristics.
- Target market = A segment that presents the greatest opportunity.
- The specific individuals or groups within the market that are the most likely to be potential customers for the goods or services of the business.





## Market Size



Reference: Holdford DA, *Marketing for Pharmacists*, American Pharmacists Association 2007, p. 31.

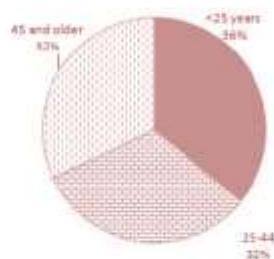


## Market, Market Segments, Target

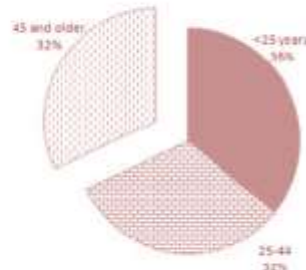
**Total Market**  
2.7 million people



**Market Segments**  
By Age



**Selection of**  
**Target Market**



See Chapter 4





## Market Size

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Year	Size of Target Market(s)	Market Share of Target Market(s) (%)	No. of Customers
1	100,000	5	5,000
2	105,000	6	6,300
3	110,250	8	8,820
4	115,762	10	11,576
5	121,550	15	18,232



See Chapter 4



## Audience Participation

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- Who (and how many) are the customers for the CPS you would like to propose?





### 3. Who is a Competitor?

- Any person or company that:
  - Provides the same or similar service
  - Competes for the same market and/or customer base
  - Satisfies the same customer need
- May not be applicable to services proposed within an organization



## Evaluating Competitors

Table 4.2. Example of Competitor Analysis

Competitor	No. of Years Providing This Service	Estimated No. of Customers	Estimated or Known Percentage of Market (market share)	Product or Service Niche
Example	10	500 patients	60	Low price leader
Name (competitor 1)				
Name (competitor 2)				
Name (competitor 3)				



See Chapter 4





## SWOT Analysis

- **Internal:** characteristics of the business (i.e., relative to its competitors).
  - Strengths
  - Weaknesses
- **External:** originate from the environment
  - Opportunities - areas of potential (future) customer need.
  - Threats - current or future challenges to the business.

### SWOT ANALYSIS



## Steps in the Business Planning Process

Table 2.2. Steps in the Business Planning Process

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See Chapter 5





## Example Format

(Note: format may depend on scope and purpose)

- Executive Summary
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## Purpose and Importance

- Purpose: to understand the details of how the service will be run.
- Important for implementation if approved.
- Important for development of financial projections.







## Key Points

1. Describe the processes and workflow, including the customer interface (step-by-step).
2. Describe the facility and equipment.
3. Describe the personnel (numbers, qualifications, roles), and the organizational structure and reporting relationships.

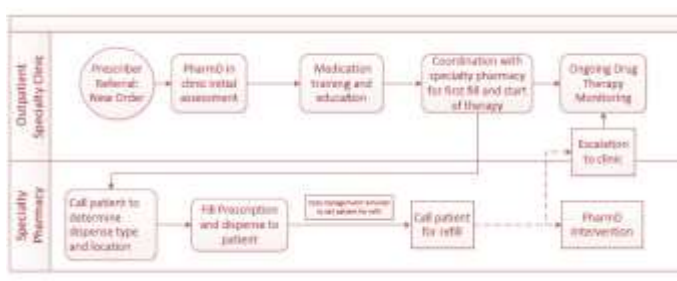


## 1. Workflow

- What is the workflow, including activities of each staff member?
- How do patients/customers interface with the staff?
- Example: Specialty pharmacy



Chapter 5





## 2. Facilities and Equipment

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- Describe the new or remodeled facilities required to provide the service, if any. Should be consistent with workflow description.
- List and describe the equipment and other non-personnel resources need to provide the service. Include quantity and information necessary for budgeting purposes.



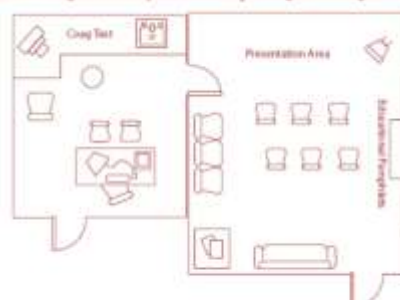
## Example: Anticoagulation Program

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- Equipment
  - INR testing machine
  - Computers and software
  - Monitor for group presentations
  - Furniture (chairs, desks, cabinets, tables)
  - Blood pressure monitors
  - Supplies (alcohol swabs, syringes, disposal bins, test strips)
  - Printed material (informed consent forms, patient questionnaires, pamphlets)

### • Facility

Figure 5-2. Diagram of a Proposed Pharmacy-Managed Anticoagulation Clinic



Adapted with permission from McGraw-Hill, Schumack GL, Wong JHC. Business planning for pharmacy programs. In: Daniels M, Zupancik M, eds. Pharmacy Management: Essentials for All Practice Settings. New York: McGraw-Hill Medical Publishing Division, 2005.



See Chapter 5





### 3. Personnel

- Describe the personnel required to provide the service, including job title, qualifications, job description/roles, and the number of positions or FTEs needed.
- Describe the organizational structure and reporting relationships.



### Example: Anticoagulation Program

- Pharmacists 0.5 FTE (2 pharmacists working 0.25 each), must have current license, have completed anticoagulation certificate course. Duties are to testing INR, monitor effects, counsel patients, group sessions.
- Technician 0.5 FTE (2 technicians working 0.25 each), must be good communicators. Duties are scheduling, patient intake, get informed consent, collect billing information, billing.





# Organizational Structure and Reporting Relationships

Figure 5-1. Example Organizational Chart



See Chapter 5



## Audience Participation

- What are the personnel requirements for the CPS you would like to propose?



## UIC Steps in the Business Planning Process

Table 2.2. Steps in the Business Planning Process

Step	Activity	Chapter
1	Exploring and developing the business concept (sometimes called "preplanning")	3
2	Evaluating the market and competitors	4
3	Planning the operations and resources required	5
4	Assessing regulatory requirements and standards of practice	6
5	Developing a promotional program	7
✓ 6	Developing financial projections	8
7	Planning for implementation	9
8	Writing and presenting the business plan	10
9	Evaluating the success of the program after implementation	6 and 9



See Chapter 8



## Example Format

(Note: format may depend on scope and purpose)

- Executive Summary
- Background and Description
- Market Analysis
- Regulatory/Legal Consideration
- Operational Structure and Processes
- Marketing Strategy
- ✓ • Financial Projections
- Milestones, Schedule, Action Plan
- Exit Strategy
- Supportive Appendix Documents





- Purpose: to estimate the financial implications of the service over short-run (3-5 years), and to facilitate decision to approve program.



## Key Points



1. Under the most-likely case, describe the sources and amount of revenue/income (or cost-savings) anticipated on an annual basis for first 3-5 years.
2. Under the most-likely case, describe the investments (costs) required
  - a) Initial costs (one-time or start-up costs for facilities, equipment, other).
  - b) Annual or on-going costs (personnel, supplies, overhead) for each of first 3-5 years.





## Key Points

3. Under the most-likely case, identify the
  - a) net profit,
  - b) payback period, and
  - c) percent return on investment after 3-5 years
4. Describe the financial performance (a. revenue, b. expenses, c. net) over the first 3-5 years
  - a) Under best-case scenario
  - b) Under worst case scenario



	Year 1	Year 2	Year 3	Total
Operating revenue				
Medicare revenue	24,860	27,450	30,202	82,610
Additional purchases	12,400	13,040	15,004	41,044
Deductions from patient revenue	(1,000)	(1,300)	(1,210)	(3,310)
Net patient revenue	36,360	39,190	43,996	120,352
Operating expenses				
Salaries	25,000	27,500	30,250	82,750
Employee benefits	6,250	6,875	7,563	20,688
Medical director	0	0	0	0
Medical supplies	2,000	2,200	2,420	6,620
Office supplies	0	0	0	0
Education & Travel	1,000	1,100	1,210	3,310
Maintenance/repair	0	0	0	0
Food	500	550	605	1,655
Contracted services	0	0	0	0
Marketing	0	0	0	0
Drugs & Subscriptions	0	0	0	0
Rent	0	0	0	0
Postage	0	0	0	0
Equipment expense	1,000	0	0	1,000
Utilities/telephone	0	0	0	0
Insurance	0	0	0	0
Furniture	3,000	0	0	3,000
Bad debt expense	0	0	0	0
Building and improvement	0	0	0	0
Equipment depreciation	0	0	0	0
Total operating expenses	36,750	36,225	42,043	115,018
Net income (loss)	(2,390)	1,771	1,948	1,329
Net Assets at beginning	0	(2,390)	1,771	
Net Assets at end	(2,390)	(619)	1,329	

## Sample Revenue and Expense Projections (BUDGET) for a Clinical Pharmacy Service





## 1. Estimate the Revenue/Savings

- Direct revenue from services provided (cognitive services)
- Product-related revenue/income - e.g., increased OTC sales due to higher traffic through the pharmacy
- Reduction in other health care utilization/expenditures (e.g., reduced drug costs, reduced physician office visits, reduced hospitalizations or length of stay). Note that this is not really “revenue” but rather economic benefit.



## Example MTM Service: Revenue Projections

	Year 1	Year 2	Year 3
Revenue			
1. Current patients	\$12,000	\$12,360	\$12,730
2. New patients	\$0	\$6,180	\$12,730
3. Spill-over	\$0	\$7,500	\$15,450
Total Revenue	\$12,000	\$26,040	\$40,910

### Assumptions

- \*100 current patients in each year
- \*50 new patients in year 2 and 100 in year 3
- \*Charge \$120/patient in year 1
- \*Spill-over revenue of \$50/patient
- \*Prices increase 3% in each year







## 2. Estimate the Costs

- Ways to categorize costs:
  - Initial (start-up) v. On-going costs
  - Fixed v. Variable costs
  - Direct v. Indirect (Allocated)
  - Capital v. Operating
- Projection of costs may be based on a variety of factors, which you should state. Might include volume of service (and change over time), consideration of inflation, purchasing practices, etc.



## Example MTM Service: Expense Projections

	Year 1	Year 2	Year 3
Expenses			
1. Salary and benefits	\$9,000	\$13,905	\$19,096
2. Patient supplies	\$500	\$772	\$1,061
3. Marketing	\$1,000	\$1,030	\$1,061
4. Furniture (one-time)	\$3,000	\$0	\$0
5. Staff education (one-time)	\$1,000	\$0	\$0
Total Expenses	\$14,500	\$15,707	\$21,218

### Assumptions

\*All costs inflated by 3% each year

\*Pharmacists hours based on # patients

(1.5 hours of pharmacist time per patient at \$60/hr)





### 3. Estimate the Net Income, Payback Period, and %ROI

- Net income (each year and cumulative for 3-5 yrs)  
= Revenues – Costs (shown in income statement)
- What is the ROI for the organization?  
= (cumulative net income / cumulative investment) x 100  
\*\*\*here cumulative means total over 3-5 yr period
- What is the payback period for the investment?  
= breakeven point (time, i.e., months)?  
(compare cumulative costs = cumulative revenues, point beyond which revenues exceed costs)  
\*\*\*here cumulative means total up to that point in time



### Example MTM Service: Net Profit Projections

	Year 1	Year 2	Year 3
Revenue			
1. Current patients	\$12,000	\$12,360	\$12,730
2. New patients	\$0	\$6,180	\$12,730
3. Spill-over	\$0	\$7,500	\$15,450
Total Revenue	\$12,000	\$26,040	\$40,910
Expenses			
1. Salary and benefits	\$9,000	\$13,905	\$19,096
2. Patient supplies	\$500	\$772	\$1,061
3. Marketing	\$1,000	\$1,030	\$1,061
4. Furniture (one-time)	\$3,000	\$0	\$0
5. Staff education (one-time)	\$1,000	\$0	\$0
Total Expenses	\$14,500	\$15,707	\$21,218
Net Profit	(\$2,500)	\$10,333	\$19,692



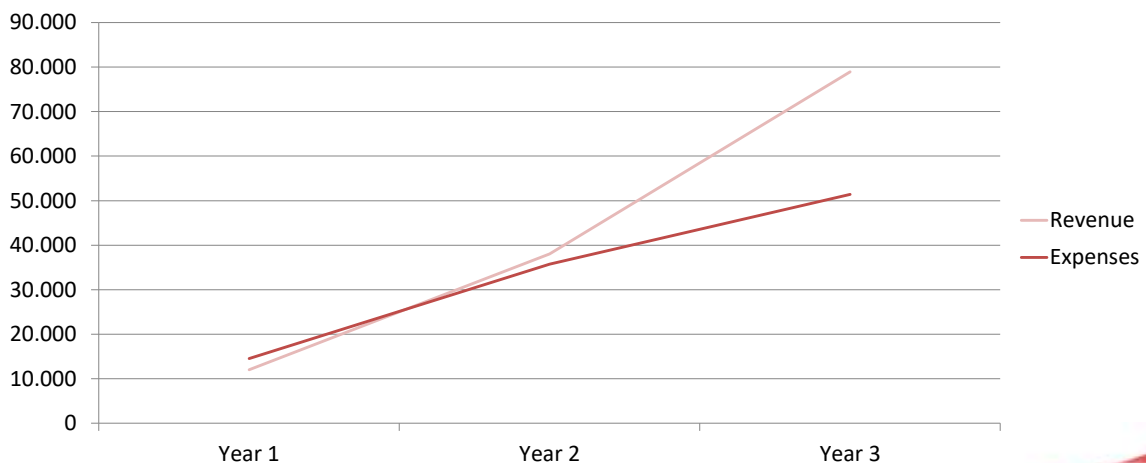


## ROI Calculation for Case

- $\text{ROI} = (\text{cumulative net income} / \text{cumulative investment}) \times 100$
- Cumulative net income after 3 years for MTM program =  $(\$2,500) + \$10,333 + \$19,692 = \$27,525$
- Cumulative investment after 3 years for MTM program =  $\$14,500 + \$15,707 + \$21,218 = \$51,425$
- ROI after 3 years =  $(\$27,525 / \$51,425) \times 100 = 53.52\%$



## Payback Period





## 4. Describe Best and Worse Case

- Best case – if business is better than you expected (explain what you adjusted)
- Worst case – if business is worse than you expected (explain what you adjusted)
- For each describe what happens over the 3-5 year time period to:
  - revenues
  - expenses
  - net profit



## Audience Participation

- For the CPS you would like to propose, what might be reasons that the program performs better or worse than your financial projections?





## Part 2: Business Planning for CPS

- Overview
- The process of business planning
- **How to convince decision-makers**



## “Selling” your Plan

- Audience
  - Decision-makers
  - Those who will implement plan
  - Stakeholders
  - Investors
- Presentation
  - Written document
  - Oral presentation
- Recommendation





## End Result

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- MAKE A DECISION
  - Proceed with the proposed business, or not
  - Proceed with an altered version of the proposed business
  - Delay implementation until conditions improve



## When are Proposals Successful?

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- When the service proposed:
  - is financially viable. (#1)
  - fills an obvious clinical or operational need.
  - supports the overall strategic plan and mission of the organization.
  - has physician (or other stakeholder) support.





## When are Proposals NOT Successful?

- Homework not done, or not done well
- Does not address a critical need
- Financial viability questionable
- No champion or stakeholder support
- A poor written or verbal presentation



## Conclusion Part 2

- Business planning is a more comprehensive approach compared to that described in part 1.
- There is a structured process for business planning, and a typical format for the business plan document.
- Key sections are the background/description, market analysis, operations, clinical/quality requirements, and the financial analysis.
- The plan not only provides the evidence to make a decision to approve the program (or not), but is a roadmap for implementation.





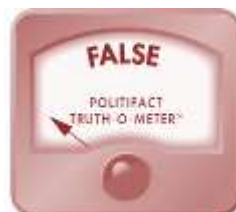
## Self-Assessment Question #1

For every dollar invested in a clinical pharmacy service, 4 to 5 dollars in benefit are produced.



## Self-Assessment Question #2

The purpose of “pre-planning” in the business plan process is to generate enough information to make a decision about implementing the proposed clinical pharmacy service.







## Take Home Points

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- Strategies exist for economic justification of proposed new CPS.
- Business planning is a more comprehensive approach, that considers more than just the financial aspects of the proposed program.
- Resources exist that can help if you pursue economic justification and/or business planning for CPS.



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