Service Lines in Rural Healthcare: A Bottom-Up Approach

Prepared for the Center for Optimizing Rural Health

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Introductions

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Objectives and **Key Outcomes**:

1

Understand the ***value of a service line strategy*** as an effective approach to deliver coordinated care in rural communities, including an understanding of which service lines are most likely to add value and enhance care in rural areas.

2

Learn a ***bottom-up approach*** to developing an optimized service line strategy in rural settings that considers the community's specific patient population, provider needs and capacity, and approaches to completing the care continuum.

3

Build awareness of the ***financial considerations*** associated with service line development, including the impact on rural hospitals, and implications of current and proposed reimbursement models.

Service Lines in Rural Healthcare: A Bottom-Up Approach

1 Background & Strategic Thinking

2 Service Line Development

3 Case Studies

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1 Background & Strategic Thinking

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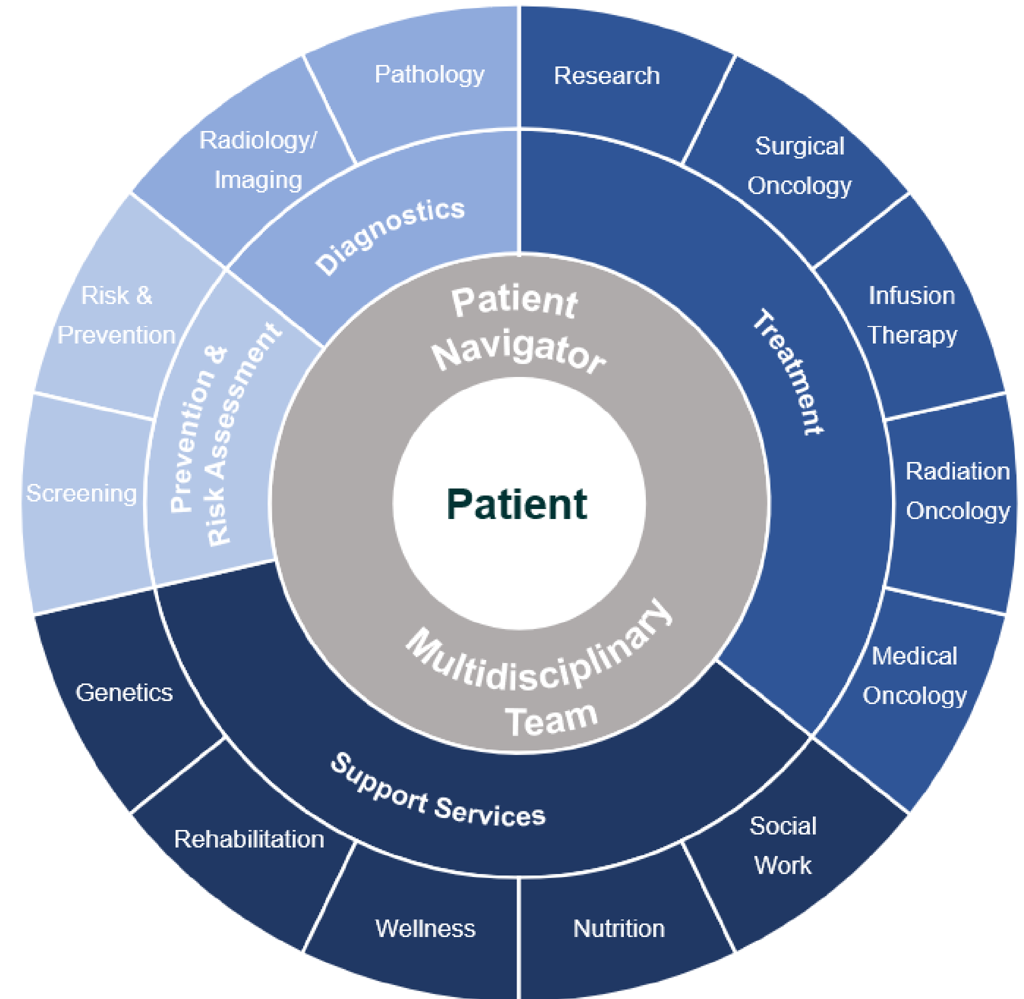
What is a **service line**?

Service lines provide a governance structure that effectively and efficiently manages clinical care delivery, quality, growth, and investment around a ***specific patient population or disease*** (such as cancer or heart disease).

Patients with a specific disease or condition typically require a ***common set of services*** and may have common needs and challenges. Organizing care around these common needs enables health systems to focus on relevant services and ***optimize service processes and patient outcomes***.

Example: Cancer Service Line



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Recent trends impacting all hospitals and hospital services

Increasing costs of delivering care
- Labor costs and workforce shortages
- Drugs, equipment, and supplies

Reduced funding & regulatory uncertainty
- Reliance on government payers & declining reimbursement
- End of Public Health Emergency and stimulus funding
- 340B, alternative payment models, telehealth, enforcement

Changing methods of care delivery
- Inpatient to outpatient
- In-person to virtual

Challenges from new market entrants
- Private equity-funded “gatekeepers”
- Technology solutions

Erosion of public trust
- COVID controversies
- Attacks on hospital pricing

Source: https://www.advisory.com/topics/market-trends/2022/12/16-things-ceos-need-to-know-in-2023

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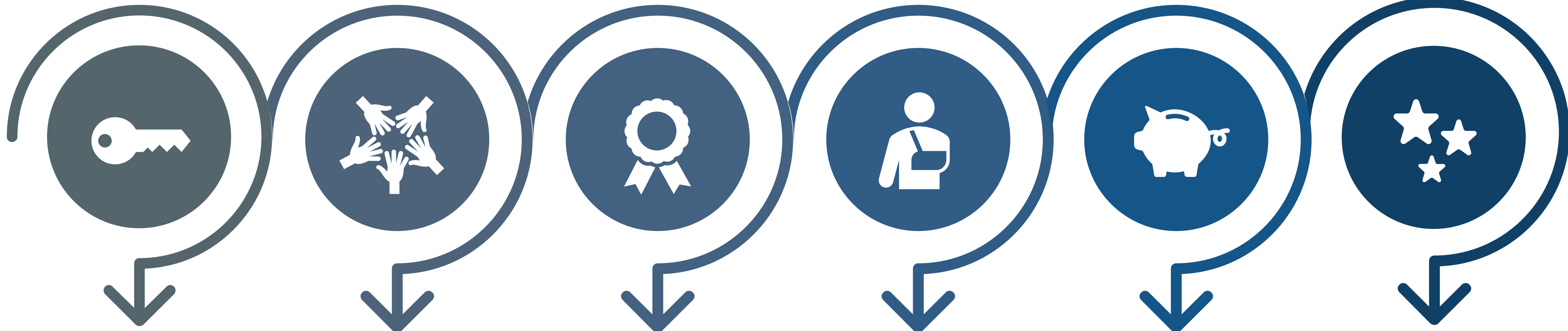
Unique **rural hospital challenges** impact service line development.

- Low(er) patient volume results in higher per-patient service costs
- Quality measures may be skewed due to the small number of patients served
- Lack of local subspecialists and overall resource (staffing and other) constraints
- Lack of leadership bandwidth to focus on strategic initiatives
- Traditional focus on investment in the hub and not the spokes
- Potentially different reimbursement structures may drive different incentives

Need to seek options to address these challenges – is it feasible?

Why develop service lines in **rural settings**?



Access

Improve access to tertiary and quaternary care in key areas/specialties. Provide appropriate, **timely access to providers and services** at the right locations for patients and care networks.

Coordination

Improve **coordination of care across the continuum**, ability to manage chronic conditions, provide ancillary services, and furnish post-acute care locally with support from strategic partners.

Quality

Support delivery of **measurable, high-quality** patient outcomes.

Patient Experience

Deliver care that is focused on creating a **positive and encouraging** patient experience.

Cost

Design care models through **efficient use of resources**. Value definitions have expanded to include cost-effectiveness as a critical performance component.

Differentiation

Focus efforts on providing differentiated care; "**Less but better**"

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Understanding the role of your facility in the healthcare **ecosystem.**

Acuity

Tertiary/Quaternary Referral Center

CAH

Care Team Center

Post-Acute Care

Diagnostic Center

Access Clinic

Self

Community/Lifestyle Center

Patient Home

Framing Provider Success: **Differentiation**

Strategic Underpinnings: Quality, Safety, Service

Differentiation Criterion	Definition
High-Performing Operations	Operating metrics consistent with cost-effective delivery of care. Seamless access. Demonstrated ability to attract talent.
Channel Sophistication	Able to engage, serve and care for patients across a continuum of traditional and emerging (digital, virtual) settings.
Financial Strength	Consistent, strong financial results and balance sheet to withstand economic headwinds/enable strategic investments.
High-Value Delivery Networks	Own/participate in all or part of emerging high-value delivery networks (e.g., CIN) across payer classes; cross-continuum provider relationships to support.
Market Position	Strong and growing market position to ensure continued relevance, re-capitalization, and investment.
Brand Strength/Awareness	Demonstrable recognition as differentiated/essential participant in markets served.
Partnership Mindset	Flexibility and mindset to seek partnerships to elevate analytic and business intelligence infrastructure and experience that enables delivery of value, including quality, payment, and other risk management.

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Differentiation is a multivariable equation that **starts with design**.

Clinical service lines must deliver value to their markets by organizing and performing to achieve high performance.

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Success in the future will be measured by competencies and relationships that make providers **essential to their markets.**

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2 | Service Line Development

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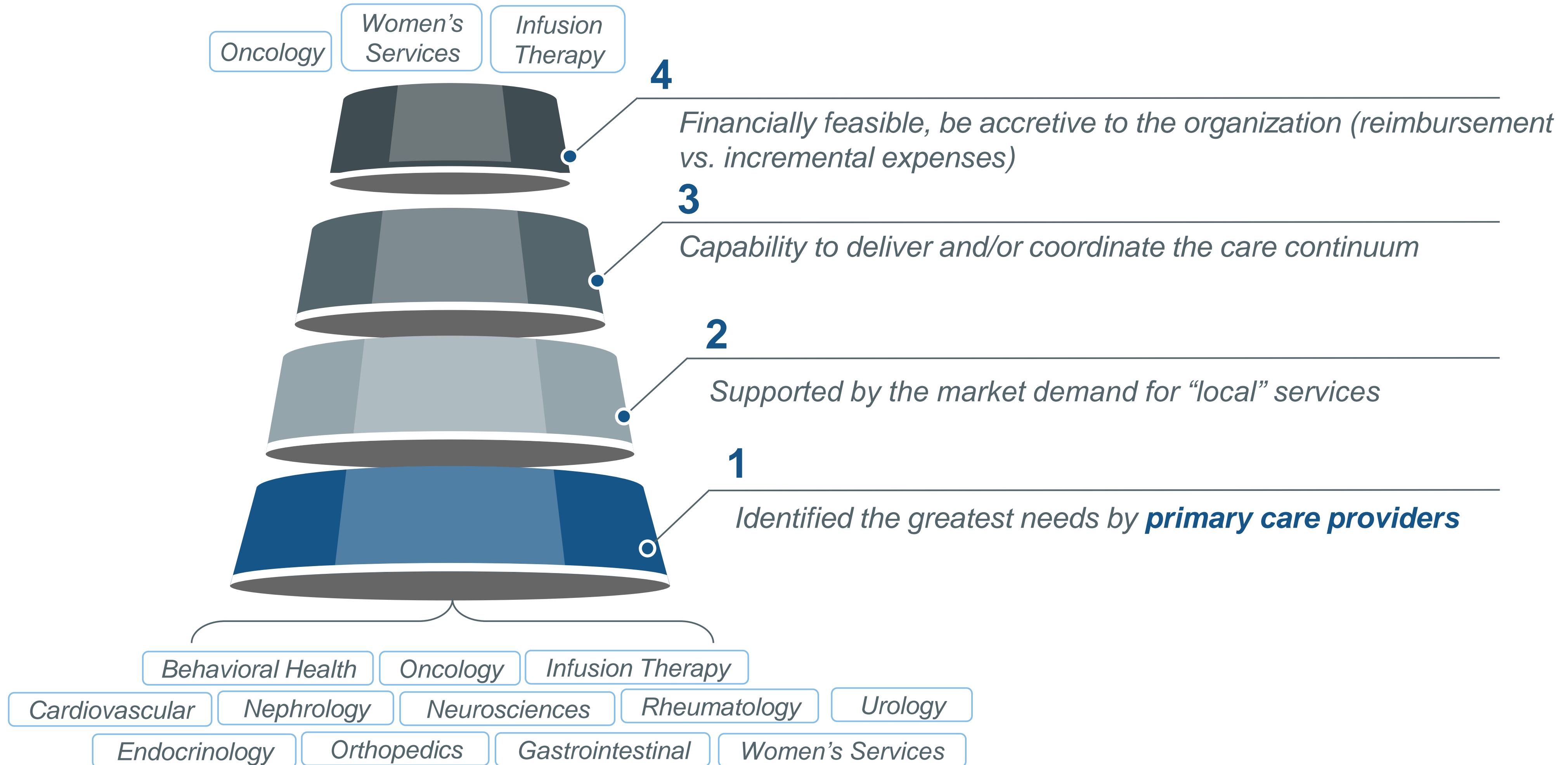
Prioritize investment in rural hospital service line development by evaluating and **building a service line from the bottom up**:



Identify the greatest needs by discussing with your primary care providers

Start with primary care base as your **biggest asset**.

- Conduct open-ended interviews and surveys
  - ✓ *What conditions/diseases do they see most often?*
  - ✓ *Where do they refer patients for specialty and acute inpatient care?*
  - ✓ *Where is access a challenge?*
  - ✓ *What are the pain points for your patients and you as a provider?*
  - ✓ *What are the gaps in care provided locally?*
  - ✓ *How would you prioritize services to consider developing/enhancing?*

Why?

Doctors critical to future referral stream

Our community providers can quickly tell us not only where the major service gaps are, but whether they would refer their patients to us if we filled those gaps

Photo source: https://www.intercoastalmedical.com/2017/09/14/what-is-the-role-of-a-primary-care-physician-in-your-healthcare/

Validate market demand with data

Review market data

- Community health needs assessments
- State data
- National data (i.e., CDC)
- Census data (focus on next 10-year demographics by age cohort)

Assess size of market need

- Market volumes
- Hospital volumes
- Current outcomes

Service Line Market Factors

Market Element	Definition	Supporting Data/Information	Evaluation
Population Growth	Larger/growing population advantages clinical program growth	PSA: 4.5 million; +1.4% CAGR	
Demographics	Aging into high utilizing cohorts (65+) advantages clinical program growth	PSA 65+: +4.3% CAGR	
Health Status	Communities with poorer health status (i.e., heart disease, obesity, diabetes) advantages clinical program growth	Regional US heart/vascular disease prevalence higher than national rates	
Competition	Presence of organized, well-capitalized, high quality clinical service line programs	PSA populated by four (4) strong, geographically-focused competing programs	
Volume Demand			
Inpatient	Additional volume (inpatient and outpatient) generated in the market advantages clinical program growth	Moderate ... over 10-ye... strong OP...	
Outpatient			

Example

Market Share Trends by Service Line with Physician Need

Service Line	IP Share 2015	IP Share 2017	Change '15-'17	Physician Need	Physician Need Comments
Cardiology	83.1%	79.2%	-3.9%	No additional need	Recently added a cardiologist
Cardiology Int	24.8%	32.0%	7.2%		
CT Surgery	20.9%	13.0%	-7.9%	Not applicable	n/a
Gastroenterology	78.8%	68.9%	-9.9%	Need for 2	High priority
General Surgery	55.9%	49.8%	-6.0%	Need for 3-4	Medium priority
Gynecology	37.6%	42.0%	4.4%	Need for 7-8	Need to respond to competing GYNs
Obstetrics	58.1%	51.1%	-7.0%		
Oncology	51.4%	58.1%	6.8%	Recently recruited 1	Recently recruited 1
Orthopedics	58.8%	32.8%	-25.9%	Recently replaced 1	Recently replaced 1
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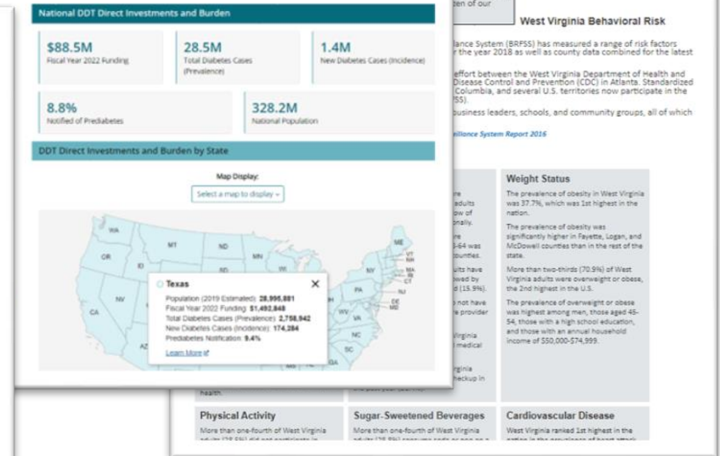
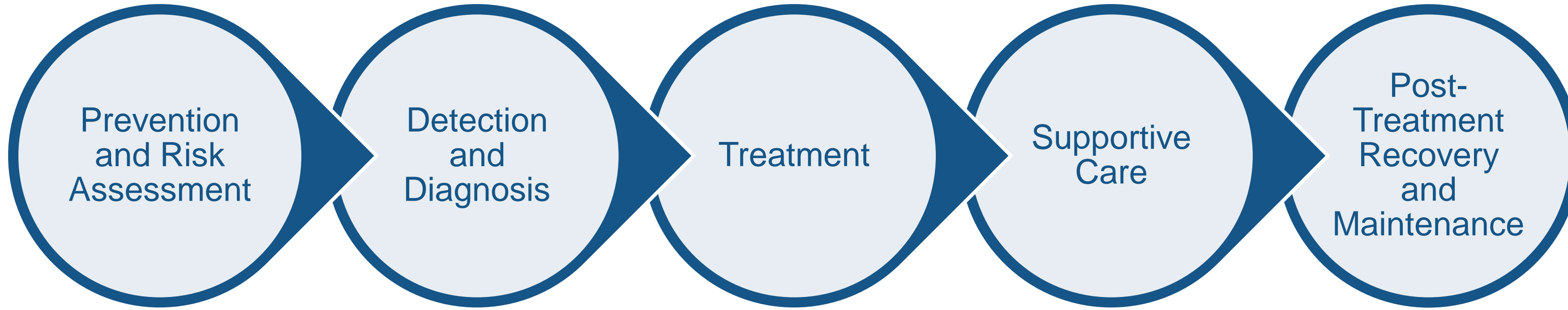
Total Excluding Newborns	**67.2%**	**60.1%**	**-7.1%**		



Identify the care continuum

Endocrinology Service Line – illustration only



Diabetes management requires a well-coordinated team which may include:

- Primary care provider and team (diabetic educator, etc.) accessing other resources as needed
- Community screening and outreach clinics
- Endocrinologist
- Clinical pharmacist
- Dietician (nutrition counseling)
- Care coordinator/patient navigator

Core Team

Supporting Team

Other possible treatment/co-morbidity management modalities:

- Bariatric Surgeon
- Physiatrist
- Podiatrist
- Home care
- Optometrist/ophthalmologist

Determine your capabilities to deliver and differentiate

Evaluation of Current Service Line Functional Capabilities

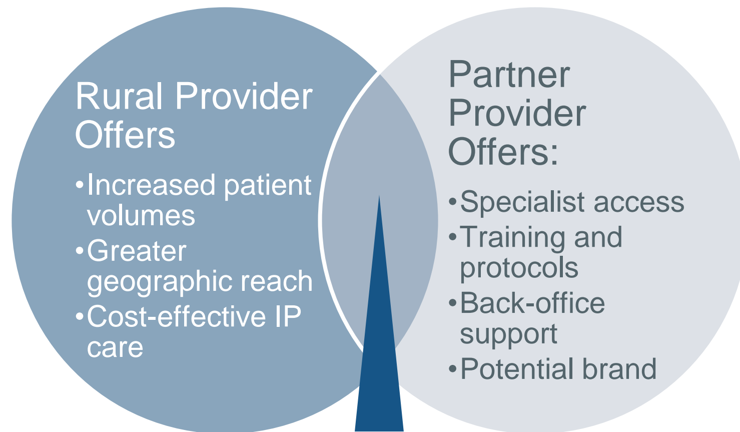
Programmatic Element	Definition	Supporting Data/Information	Evaluation
Physician Capacity	Physician capacity limitations	Capacity with newly recruited physicians and community hospitals; established physicians at capacity due to physician space limitations	
Staff Capacity	Staff capacity and level of training limitations	Varied staff restraints per location; advanced level of acuity requires highly trained nursing staff; new growth and space will require additional, properly trained staff	
Support Services (e.g., imaging, lab)	Program growth will require growth in support services	Varied support services restraints per location; new growth and space will require additional support services	
Access	Convenient access to services (i.e., locations, processes) advantages clinical program growth		
• Insurance coverage		Program not currently experiencing changes/shifts in patient coverage	
• Referral base		Out of Network Referrals Cardiology - 42.0% Cardiology Subspecialty - 30.2% Cardiology Surgery - 44.2% Vascular Surgery - 36.0%	
• Patient intake		Centralized intake process constraining throughput efficiencies	
Space and Technology			
• Beds	Bed capacity limitations	Primary locations constrained on beds, including ICU; community hospitals noted capacity	
• Procedure/ORs	Procedure/OR capacity limitations	Primary ORs constrained; community hospitals noted capacity; robotics technology at capacity	
• Outpatient	Space for timely outpatient treatment/diagnoses	Interviewees report excellent OP access	
Quality	High quality programs attract patient preference, referrals (in/out of network), and physician recruits	Strong quality care delivery throughout with current quality/specialized providers and highly qualified recruits identified	

Example

Strategic Partnerships: Identify how full care continuum will be delivered

Potential areas of partnership:

- Protocol development
- Staff trainings
- Curbside consults
- Specialist telehealth clinics
- Patient transfer/transportation
- CAH swing bed vs SNF
- Hospital at home
- Health monitoring programs
- Support addressing SDOH



Patient-centered Service Line Care

	RURAL HOSPITAL	PARTNER A	PARTNER B
Women's Health Service Line	- Well-woman visits - Obstetrics and postpartum care - Cancer screening - Reproductive and family planning	- Gynecologic oncology specialist telehealth clinics	- Assistance developing care pathways and evidence-based protocols for women's health
Endocrinology	- Community health clinics - Primary care - Diabetes educator - Care coordinator - Pharmacist	- Endocrinologist - Dietician - Physiatrist - Ophthalmologist - Podiatrist	- Bariatric surgeon

A measured approach and strong relationship with partner hospitals is critical – with appropriate workflows and messaging to limit outmigration and preserve local care

Prioritize and sequence service lines based on evaluation outcome

Measure	Cardiology	Endocrinology	Infusion Therapy	Women's Services
Physician Support	5	4	5	3
Market Share Potential	3	5	2	4
Existing Clinical Capabilities	1	2	5	3
Partnership Potential	3	5	2	2
Ability to Differentiate	1	5	2	2
Total Composite Score	*13*	*21*	*16*	*14*
Rank	**4**	**1**	**2**	**3**

Example

Scale
1 = low
5 = high

Financial Feasibility: What are the **financial considerations** associated with service line development?

How can partnerships be leveraged to optimize investments and *reimbursement* potential?

Revenue considerations:

- Volume potential
- Pricing strategy
- Payer strategy and reimbursement rates
- 340B and site of service implications

Cost considerations:

- Understand current capacity (personnel, space, equipment)
- Fixed costs vs. variable costs (dedicated or shared?)
- Technical and professional costs (incl. physician subsidies)
- Capital expansion costs
- Inflationary pressures

Net service line income (loss)

Evaluate impact of growth on your payer mix

Understanding the financial impact on CAH Medicare cost-based reimbursement before launching into significant investments in capital or personnel. New programs should not be dilutive to Medicare cost-based reimbursement.

Today

100 total patients

Assume all Medicare

$15,000
Total Reimbursement

$15,000
Total Costs

$5,000 variable cost ($50/pp)

100 Medicare patients: $100/pp fixed + $50/pp variable = $15,000

$10,000 fixed cost ($100/pp)

Future

200 total patients

Assume all new commercial patients

($6,000) net loss

$14,000
Total Reimbursement

$20,000
Total Costs

100 Commercial patients: $50 fixed + **$30** variable = $4,000

100 Medicare patients: $50 fixed + $50 variable = $10,000

$10,000 variable cost ($50/pp)

$10,000 fixed cost ($50/pp)

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Consider **non-patient care revenue** funding sources to support service line investments

Evaluate current philanthropic resource development efforts to identify opportunities for improved performance

- Annual fund (operating expenses)
- Capital campaigns (facilities)
- Endowment (planned/deferred gifts)

Identify potential grant funding opportunities for specific initiatives

- Private foundations, state and federal programs
- Pursue through partnerships with other providers, communities

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3 | Case Studies

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Case Study: Endocrinology Service Line

ACO Collaboration with AMC

Description: Rural clinical quality improvement and accountable care organization collaborative with academic medical center (AMC)

Objective
Rural hospitals collaborate with an AMC to enhance access and ability to manage complicated diabetes patients

Approach

- Develop acute and ambulatory **protocols** for management of pediatric and adult diabetic patients
  - Adapt evidence-based guidelines with a focus on rural healthcare delivery
  - **Bootcamps** - Rural providers (physicians, nurses, support staff) attend half-day educational "boot camps" hosted locally to tailor guidelines to the community's unique resources
  - Support collecting and analyzing data regarding protocol compliance via **case reviews** to drive performance improvement initiatives
- Additional collaborative support for the most complicated cases
  - Establish a **tele-endocrinology program** with two components:
    - "Curbside consults" - rural physician can contact a specialist by phone/video to discuss a specific patient issue
    - AMC provides telehealth clinics two days per month to ease the burden on rural providers

Challenges

- Getting **time commitments** from the specialists, because AMC gives up facility billing when a specialist spends time on telehealth rather than seeing patients in the clinic
- **Building trust** between rural providers and tertiary/quaternary facility

Case Study: Service Line Growth

Promoting service line expansion and reducing outmigration

Description: 88-bed rural southeast hospital conducted a strategic and operational assessment to identify opportunities to reduce significant operating losses

Objective
Reduce outmigration and regain market share and focus on long-term sustainability

Approach

- Market and organizational assessments identified local capabilities and service gaps in key service lines
- Service lines with **high outmigration** were identified
- Focused on lower to mid-acuity opportunities that could be served locally
- **Met with local physicians** to develop approaches to improve capabilities and outcomes
- Investments prioritized on service lines expected to generate the **greatest return** (orthopedics and interventional cardiology)
- Overall operations evaluated effectiveness of cost management, revenue cycle, payer contracting, physician practice, pharmacy, and IT
- Recommendations considered areas for growth, service-mix profitability, post-acute care, value-based opportunities, and affiliations for network development

Market Share Trends by Service Line with Physician Need

Service Line	IP Share Year 1	IP Share Year 3	Change 'Yr 1-'Yr 3	Physician Need	Physician Need Comments
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Challenges

- Local **primary care shortages** impact keeping patients local and required focus on adding APPs to fill gaps
- Difficult to identify total service line costs without **cost accounting**
- Some opportunities involved considerable risk from high capital requirements
- Limited resources to execute all initiates required prioritization focused on ROI

Case Studies: Infusion Therapy and Coding Support

Partnerships with Tertiary Hospital and Other Critical Access Hospital

Description: Local physician's office eliminated offering of in-office non-oncology infusions and reached out to critical access hospital to support delivery of infusion therapy services

Objective
CAH meets local provider needs to offload infusion therapy services

Approach

- Critical access hospital partnered with a tertiary hospital to create an outpatient infusion center to accommodate patients
  - Tertiary hospital assisted critical access hospital with setup of the center
  - 3rd party experts provided analysis-based potential volume and revenue information
  - Oversight was assumed by an APP at the CAH

Description: Rural hospital that lacked coding expertise and was dissatisfied with third-party vendor developed partnership with local critical access hospital for the service

Objective
CAH needs access to quality coding support services

Approach

- Rural hospital contracted with another critical access hospital to provide coding expertise services remotely

Benefits

- Rural hospital obtained access to coding expertise
- Prevented critical access hospital with coding staff from having to reduce coder hours due to low volume

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Service lines can lead the differentiation of health systems, regardless of how far they choose to evolve across the care continuum.

- **Volume** – ensure local providers have a need and will use the service (if you build it, will they come?)
  - Engage primary care base first!
- **Access and Convenience** – provide appropriate timely access to providers and services at the right locations for patients and care networks
  - Partner with community organizations, other rural hospitals or larger medical centers to complete the continuum of care – you don't have to do it all
  - Leverage technology/innovative care models to keep patients close to home
  - Promote the service line to generate awareness
- **Cost and Efficiency** – design care models through efficient use of resources at costs below the lowest payer rates
  - Model your future payer mix and expected payment rates
  - Look for additional sustainable funding sources
- **Demonstrate Quality and Patient Experience** – achieve the best measurable patient outcomes and deliver unique, memorable services and care

> *Redesigning the clinical care provided to patients is the most powerful improvement tool of all.*
>
> *- Michael Porter*

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