Medical Staff Development Plans

ASPR Fellowship Program: Physician Recruitment 301

At the end of this session you should know:

- What a medical staff development plan is and why you need one
- Two methods of completing a medical staff development plan and how to decide which method is best for your organization
- How to select a consulting firm to assist you and what your role will be when working with a firm
- How to conduct a basic “DIY” plan

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What is a Medical Staff Development Plan?

The Medical Staff Development Plan (“MSDP”) is a study utilizing both quantitative and qualitative elements designed to help hospitals assess supply of and demand for physicians (and sometimes mid-level providers). It serves as a roadmap to assist in physician recruitment and development efforts.

• AKA:
  - Physician Needs Assessment
  - Community Survey/Needs Assessment
  - Medical Staff Workforce Plan
  - Physician Recruitment Plan
  - Physician Manpower Plan

• Practical applications can include:
  - Physician recruitment (new physicians)
  - Monitoring/executing succession planning initiatives
  - Balancing growth of hospitalists or mid-level providers versus market-based physician practices
  - Service line planning
  - Medical group and/or ambulatory facility strategy
  - Validate assumptions for facilities planning - MOB development, capacity planning
Objectives of the Plan

- Document “community need”
  - Support your compliance with Stark Law including financial support to private practices
  - Support visa applications for international medical graduates
- It helps answer the question, “do I need (can I support) another ‘x-ologist’?”
- Can help you prioritize your recruiting - where to spend limited recruiting budget to meet your organization’s goals (get the most benefit for your recruiting budget)
- Some candidates may ask how you know you can support their practice
- Some of your current physicians may be more supportive of efforts if they see documentation of a need
- Highlights deficiencies and surpluses of providers serving the community
- Typical “shelf life”: 2-3 years but varies by organization

Plan Components

- Core Elements:
  - Service Area/Market Analysis (e.g., demographics, health status, payer mix, system data and competitor data)
  - Internal/Medical Staff Analysis (gap analysis, age profile/succession planning, ED call panel coverage)
  - Community Supply and Demand of Physicians
  - Targeted Recruitment Recommendations (new and replacement)
Plan Components

- Examples of Optional Elements:
  - Stakeholder Interviews
  - Physician Written Survey
  - Hospital Benchmarking Analysis/Scorecard
  - Service Line Market Share Analysis (market capture and outmigration)

Planning Reality: Health Care is Local. Every Market is Different.

- Approach/methodology needs to reflect/account for local market realities.
  - Demographics (e.g., age profile)
  - Health status
  - Payer mix (insured/uninsured, Medicaid, Medicare, closed payer systems)
  - Use of mid-level providers
  - Physician full-time equivalency (e.g., 40 hours, less)
  - Physician practice patterns
    - Urban versus rural
    - Primary care versus specialty
    - Degree of sub-specialization
    - Adult versus pediatric
    - Employed versus private practice

Methodology of a Comprehensive Plan

- Service area analysis
  - Demographics
  - MD to pop. ratios
  - Access
  - Health status
  - HPSAs/MUAs
  - Market share/outmigration

- Discussions with management and medical staff leaders

- Inventory of physicians in the service area by specialty with rigorous validation

- Profile of current medical staff
  - Age profile
  - Specialty/subspecialty
  - Practice type

- Interviews
  - Physicians
  - Other constituents as needed (e.g., Board)
  - Community-based agencies

- Medical staff development/physician recruitment plan

- Strategic considerations
  - Strategic plan
  - Financial resources
  - Leadership alignment
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Challenges of Physician Needs Methodology

• Outdated ratios
• Hospitalists & hospital-based
• Physician extenders
• Subspecialties
• Changes in demand curve
• ID qualitative drivers of need
• “Our market versus our facility”

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Medical Staff Development Plan Process

Step 1
Determine/Identify Validate Market Area
• Evaluate application of “75% rule”
• Hospital patient origin by ZIP Code or County
• Urban versus rural

Step 2
Conduct Market Analysis
• Demographics – population, age
• Health status indicators
• Other key elements (e.g., Tobacco)
• HIV/AIDS/ML/A/MU/Ps
• Market Share and Outmigration

Step 3
Identify Physician Inventory/Supply
• Physicians located within area
• Population validation
• Confirm physician specialty/specialties
• Full-time or part-time
• Age

Step 4
Develop Demand/Needs Model
• Physician-to-population ratios
• Adjustment criteria as appropriate
• Identify preliminary needs conclusions

Step 5
Profile Client Hospital/Medical Staff
• Specialty mix/profile
• Usage – loyalty, split, low users...
• Age/maturity succession planning indicators
• Group profile
• Other

Step 6
Conduct Physician Interviews
• Physician leaders
• Broad specialty representation
• Established and new doctors

Step 7
Identify/Review Physician Capacity & Patient Access
• Waiting times to see PCP or specialist
• Referral bottlenecks
• Closed versus open physician practices
• Call coverage
Medical Staff Development Plan Process

- Step 5: Compile Draft Report
- Step 6: Review Report with Management/Revise as Needed
- Step 7: Finalize/Present to Leadership

Service Area Definition Considerations

- “75% Rule” (typically works in urban areas but not rural)
- Patient origin for hospitals
  - Discharges excluding normal newborns
  - Inpatient versus outpatient (although typically are the same)
  - Most recent 12 months available
- Contiguous area
- ZIP Codes or counties

Service Area Demographic Characteristics

- Other potential considerations
  - “Draw rate” versus raw discharges
  - Satellite facility locations
  - Competitive factors
- Planning Considerations
  - Age profile/mix
  - Health status and potential impact on demand modeling
  - Payer mix/uninsured
  - Ethnicity (physician usage and alignment)
**Ratio Selection**

- Published physician-to-population model examples
  - GMENAC
  - Kaiser
  - Medical Economics
  - Dartmouth Atlas
  - JAMA
  - Hicks & Glenn
  - Solucient

- Ratio selection considerations
  - Industry changes/trends
  - Market demographics/trends
  - Age of study/publication

**Example:**

**Service Area Physician Needs Model**

Key Variables:

1. Ratio selection (and adjustments as needed)
2. Calculation of gross need (population x ratio)
3. Accurate supply (FTE level)
4. Potential estimate of future need based on population growth
5. Potential adjusted need calculation based on outmigration

**Sample Ratio Adjustments & Subservice Line Drill Down Physician Needs Modeling**

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Base Ratio (Pop. per 1 Physician)</th>
<th>Adjustment Rationale</th>
<th>Adjustment Factor</th>
<th>New Ratio (Pop. per 1 Physician)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Practice</td>
<td>4,000</td>
<td>The market has a propensity of internists providing more of the primary care services than the family practitioners</td>
<td>Decrease demand by 15%</td>
<td>4,600</td>
</tr>
<tr>
<td>Orthopedics</td>
<td>14,000</td>
<td>Older population</td>
<td>Increase demand by 10%</td>
<td>14,300</td>
</tr>
</tbody>
</table>
Service Area HPSAs

Health Professional Shortage Areas (HPSAs) are designated by HRSA as having shortages of primary medical care providers and may be geographic, demographic, or institutional. Hospitals have broader options (e.g. visa providers) to support physician placements within HPSAs.

Value of Interviews/Qualitative Feedback

• Provides insight into medical staff dynamics/issues that suggest needs
• Input on the why, how many, and what type
• Helps validate data
  - Access issues
  - Call coverage
  - Physician supply
  - Subspecialty depth and breadth
  - Provider satisfaction and referral patterns
• Political cover/validation

Medical Staff Composition: Benchmarking

Percentage of Medical Staff Physicians by Type

<table>
<thead>
<tr>
<th>Hospital</th>
<th>PCP</th>
<th>Medical</th>
<th>Surgical</th>
<th>Hospital-based</th>
<th>Pediatric Subspecialists</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>25.2</td>
<td>30.7</td>
<td>21.1</td>
<td>18.6</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td>25-35</td>
<td>30-33</td>
<td>18-25</td>
<td>14-17</td>
<td>n/a</td>
</tr>
</tbody>
</table>
Admissions By Age Category: Example

Percentage of Total Volume by Physician Age Group

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Hospital A</th>
<th>National Range</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 40</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40-49</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50-59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60 and over</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: MDS

Physician Needs Indicators

• Macro-level modeling: physician-to-population ratios (legal requirement)
• Availability/waiting time for consumers/patients to access physician practices (primary care and across specialties)
  - Extent to which practices are closed (completely or to certain payers)
• Extent to which physicians indicate that needs exist (through discussion) based on:
  - Access issues
  - Clinical gaps
  - Quality problems/concerns
  - Other considerations

Physician Needs Indicators

• Physicians slowing practices/retiring/leaving area or changing strategic alliances (succession planning)
• Service line gaps/development initiatives/market share growth opportunities (e.g., curbing outmigration)
• Call coverage (availability and gaps)
## Recruitment Recommendations Summary

<table>
<thead>
<tr>
<th>Specialty</th>
<th>FTEs Needed 2010-2012</th>
<th>Community Need for Physicians</th>
<th>Physicians Interviewed Indicating Need</th>
<th>Expected Departures or Retirements (1-3 Years)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Care (Adult)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>• Many practices closed&lt;br&gt;• Substantial community need</td>
</tr>
<tr>
<td>Cardiology</td>
<td>3-4</td>
<td>Yes</td>
<td>Yes</td>
<td>High</td>
<td>• Succession planning&lt;br&gt;• Clinical performance</td>
</tr>
<tr>
<td>Obstetrics</td>
<td>2-4</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>• Succession planning&lt;br&gt;• Desirable for female physicians</td>
</tr>
<tr>
<td>Oncology</td>
<td>2</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>• Growing community need&lt;br&gt;• Desire for depth/breadth of services and expertise</td>
</tr>
<tr>
<td>Neurology</td>
<td>1-2</td>
<td>Yes</td>
<td>Yes</td>
<td>Potential</td>
<td>• Succession planning&lt;br&gt;• Additional staff</td>
</tr>
<tr>
<td>Orthopedic – Hand</td>
<td>1</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>• Call coverage gap</td>
</tr>
<tr>
<td>Endocrinology</td>
<td>1</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>• Succession planning&lt;br&gt;• Clinical performance</td>
</tr>
</tbody>
</table>

### Key Success Factors
- Clarify objectives upfront
- Establish clear budget, timelines, and parameters
- Assign a project point person
- Establish physician leadership “buy-in” and assistance

### Key Success Factors
- Expect/utilize a robust demand model/methodology that is market specific
- Review a draft document with input from key stakeholders including senior management and legal
- Monitor and update as needed
Cost of A Plan

- Single specialty approach: $2,000 - $5,000+ depending on level of complexity
- Full plan: typically $15,000 to $50,000 or more depending on components including:
  - Number of specialties included
  - Extent (if any) of subspecialty drill-down (e.g. pediatric subspecialties)
  - Interviews (number)
  - Physician survey

How do I create a Medical Staff Development Plan?

- Do It Yourself (DIY)
  - **Pros:** Typically costs less, may be able to complete more quickly if you have personal time to invest
  - **Cons:** May require more of a personal time investment, may be perceived as biased, may be difficult to collect competitor data
How do I create a Medical Staff Development Plan?

- Hire a Consulting Firm
  - Pros: May take less of a personal time investment, may be perceived as more free of conflict of interest, may give you more sophisticated statistical model, may be easier for firm to collect competitor data
  - Cons: Typically more expensive, might take more time to complete

How do I decide which way is better for my organization?

- Consider the needs of your organization and the use of your plan:
  - Using for internal planning only? (DIY might be ok)
  - Expecting push back from medical staff (more complex model from firm may help)
  - Using to justify recruiting or need for visas to outside entities? (Firm may testify for you if challenged)
  - No budget? (DIY may be necessity)
  - Short on time or no ready access to data? (Firm may be helpful)
  - Political issues regarding turf or findings? (Firm may provide an independent / outside opinion)

How Do I Select a Firm?

- A Request for Proposals (RFP) can be helpful
- Be very clear about what you need and want
- Take time to develop a clear process
How Do I Select a Firm?

- Consider the capabilities of the firm
  - How many studies do they do per year?
  - Are MSDPs their primary specialty?
  - What are the qualifications of those assigned to your MDSP?
  - Where are they located? (do they have experience in your region and will it be convenient to work with them - time zone and travel expenses)
  - How long have they been in business?
  - Check references

- Ask what the firm can do for you
  - Customize statistical model to meet your level of need? (multiple markets, patient in/out migration, crossover effects)
  - Gather competitor data for you?
  - Conduct community surveys?
  - Provide outside benchmarking (productivity etc)?
  - Final report? What format?
  - In person presentation of final data?
  - Guidance as to how to maximize "buy-in" from your medical staff?

DIY: How Do I Calculate Supply and Demand?

- Supply
  - FTE?
  - Practice Lifecycle?
  - Crossover Effect?

- Demand
  - National physician to population ratios?
  - Local Demographics (age and gender)?
  - Community surveys?
  - Disease Prevalence?
  - Productivity Data?
  - In- and Out-migration?
ASPR  DIY: Calculating Physician Supply

- Start with your Medical staff list from the Credentialing Office
  - Request name, specialty, and age
- Collect information on providers not on your Medical Staff
  - Use HMO providers in your community to get a listing of all of the member providers (most have websites where you can search by specialty to get a listing of member providers)
  - Use your local phone book to identify other physicians in the community

ASPR  DIY: Determining Physician Supply

- Contact each of the physician practices by phone (Office Managers are best) to obtain:
  - Physicians and Mid-Levels: FTE and Age (if not known)
  - Expected or Planned Retirements
  - Anticipated Departures and Recruitments
  - Wait times for Visits (urgent and routine)
  - Emergency Department Coverage (do the providers take call for the ED?)
  - Do the providers serve Medicaid and Indigent Patients?
  - Is the practice planning to expand its services by either scope of practice or by geography?

ASPR  DIY: Calculating Supply

- Full Time Equivalent (FTE) when determining how many physicians you have in your primary service area, calculate it by the amount of time (FTE) a physician spends in direct patient care, rather than by “counting heads”.
DIY: Calculating Supply

- **Practice Lifecycle**
  - S = Start Up 0-2 years
  - G = Growth 2-10 years
  - M = Maturation 10-22 years
  - D = Decline 22-30 years
  - R/R = Retirement/Recruitment 30+ years

Physicians in different stages of the practice lifecycle tend to have different productivity in terms of the number of patients they are able to see.

DIY: Calculating Supply

- **Crossover Effect** is when physicians of one specialty also provide services of another specialty. For example, if a primary care physician in a rural area also provides some dermatology and cardiology services to patients. This may affect the demand for services from dermatologists and cardiologists in neighboring communities.

DIY: How Do I Calculate Demand?

- **In- and Out-Migration** describe the movement of patients in and out of your primary service area.
  - Patients outside your primary service area may come in to your organization for care, creating additional demand for services (in-migration).
  - Patients from within your primary service area may seek care outside the service area, reducing demand for services in your community (out-migration).
• Your Hospital’s Service Population as it pertains to STARK may be very different than what your marketing department defines it.

• STARK describes it very specifically as the contiguous zip codes from where your Hospital draws 75% of its inpatient population ("75% Rule").

DIY: Defining Your Hospital’s Service Population

• This can only be determined by knowing how many inpatients (discharges) come to your hospital and what zip code they came from.

• Compile the information in an excel file, then sort by zip code with the highest number of inpatients.

• Add these inpatients up until the total is 75% of the overall total of inpatients.

• Once you determine which zip codes should be used (and that they are contiguous), use census or other strategic planning resources to find the total number of people in each of the zip codes.

• You may want to use census data for future years (for example planning for 2015).

• The total for these zip codes is your Service Population.
**ASPR DIY: Example of Calculating Service Population**

<table>
<thead>
<tr>
<th>Zip Code</th>
<th>Inpatient Total 2012</th>
<th>Population Total 2012</th>
<th>% of Total for Zip Code</th>
<th>Service Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>12804</td>
<td>2,578</td>
<td>27,596</td>
<td>16%</td>
<td>2,578</td>
</tr>
<tr>
<td>12801</td>
<td>2,425</td>
<td>14,402</td>
<td>31%</td>
<td>5,003</td>
</tr>
<tr>
<td>12839</td>
<td>1,520</td>
<td>12,815</td>
<td>41%</td>
<td>6,523</td>
</tr>
<tr>
<td>12828</td>
<td>1,200</td>
<td>9,069</td>
<td>48%</td>
<td>7,723</td>
</tr>
<tr>
<td>12803</td>
<td>793</td>
<td>7,705</td>
<td>53%</td>
<td>8,516</td>
</tr>
<tr>
<td>12832</td>
<td>709</td>
<td>7,492</td>
<td>58%</td>
<td>9,225</td>
</tr>
<tr>
<td>12831</td>
<td>531</td>
<td>19,039</td>
<td>61%</td>
<td>9,756</td>
</tr>
<tr>
<td>12885</td>
<td>515</td>
<td>5,225</td>
<td>64%</td>
<td>10,271</td>
</tr>
<tr>
<td>12845</td>
<td>454</td>
<td>6,362</td>
<td>67%</td>
<td>10,725</td>
</tr>
<tr>
<td>12809</td>
<td>421</td>
<td>3,860</td>
<td>70%</td>
<td>11,146</td>
</tr>
<tr>
<td>12827</td>
<td>376</td>
<td>4,133</td>
<td>72%</td>
<td>11,522</td>
</tr>
<tr>
<td>12822</td>
<td>359</td>
<td>6,240</td>
<td>74%</td>
<td>11,881</td>
</tr>
<tr>
<td>12887</td>
<td>329</td>
<td>7,075</td>
<td>76%</td>
<td>12,210</td>
</tr>
<tr>
<td>12834</td>
<td>264</td>
<td>7,898</td>
<td>78%</td>
<td>12,474</td>
</tr>
</tbody>
</table>

Total: 15,977

**ASPR DIY: Determining Physician Demand**

- **Physician to Population Ratios**
  - *This is a method to calculate the number of physicians your community is “supposed” to have*
  - *There are several sources of physician to population ratio data that can be used*
  - *You may want to utilize 3 sources of physician to population ratio data and average them: take this averaged ratio and apply it to your Hospital’s Service Population*

**ASPR DIY: Example of Calculating Physician to Population Ratios**

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Service Percentage</th>
<th>Health Care Strategic National Range</th>
<th>Health Care Management National Average</th>
<th>DIY’s Ratio</th>
<th>Ratio to Use for Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Practice</td>
<td>18.50</td>
<td>16.2 – 21.3</td>
<td>22.70</td>
<td>26</td>
<td>28.2</td>
</tr>
</tbody>
</table>

17
• Doing the Math
  - If your Service Population according to the 75% rule is 131,013 you apply the 20.2 per 100,000 to that number. The math looks like this (“solve for X”):

\[
\begin{align*}
X &= \frac{20.2}{100,000} \\
X &= \frac{X \times 131,013}{100,000} \\
X &= 2,646.462 \quad \text{(Solve for X)}
\end{align*}
\]

\[
X = 26.5 \quad \text{Therefore – my Service Population needs 26.5 Family Practitioners.}
\]

• DIY: Analysis
  - Compare the “Existing Supply” number to the number calculated from your Physician to Population Analysis or “Needed Supply”
  - The result will indicate if you have a Physician Shortage based on Physician to Population Ratio data

• DIY: Analysis
  - Calculate “Existing” Physician Supply
    - Add up the total FTEs for your physicians.
    - Add up the total FTEs for your mid-levels and divide by half (counting mid-levels as half a provider)
    - Add both numbers to get your total FTE providers for that specialty’s “Existing Supply”

Example: Currently have 3 Neurologists, one is 50%; we also have one FT Physician Assistant. The total “Existing” Supply is 3 FTEs (2.5 docs and 0.5 mid-levels)
DIY: Analysis

- Evaluate Impact of Pending Retirements and Departures
  - One methodology is to assume that any physician age 57+ could retire within 3 years and those 60+ could retire at anytime
  - Subtract these FTEs and from your “Existing” supply
  - Subtract any additional FTEs whom are known to be retiring within the next 3 years
  - Add in FTEs you know will be joining practices
  - Compare this new “Existing” Supply to the “Needed” Supply

  Example: Of the 3 Neurologists - 1 FTE will retire this year. You must adjust your “Existing Supply” to 2 FTEs

DIY: Analysis

- Evaluate Emergency Care Needs
  - Is each specialty providing adequate Emergency Department coverage? If not - community need may be demonstrated

- Evaluate New Services
  - Is your organization is planning to add a new service line which requires additional or new specialists? If so, community need may be demonstrated

- Evaluate Wait Times
  - Are wait times for patients to be seen considered to be unacceptably long? If so, community need may be demonstrated

DIY: Analysis

- Serving Medicaid/Indigent Population
  - Are Medicaid and/or indigent patients adequately served by all specialties? If not, community need may be demonstrated

- Health Provider Shortage Area (HPSA)
  - Is your organization within an area designated as a HPSA, as defined in 42 CFR 5.1-5.4? If so, community need may be demonstrated

- Community Characteristics
  - Can you demonstrate that physicians are reluctant to relocate to the community due to its location?
DIY: Other Factors to Consider

• Demographic data
  - Example: If your community has an increase in women of child-bearing age, you may need to assume a future increased demand for OBGYN and Pediatric services.
  - Example: If there is growth in the 65+ group, you may need to assume future increased demand for Cardiology, Endocrinology, and Orthopedic Surgery, and less future demand for OBGYN and Pediatrics.

• Prevalence and incidence rates for various diseases in your community
  - Does your community have higher rates of cancer than the state or national average? If so, you may have more demand for Oncologists than your patient population may suggest.
  - If cardiovascular disease is higher than state and national averages, you may need more Cardiologists, etc.

The following key explains the community need criteria and the codes used in the table above:

1. Physician shortages - current or within a 3 year time period - based on physician to population ratios
2. Lack of availability of the service or long wait periods (including ECC coverage problems)
3. Reluctance of physicians to relocate to the hospital due to its location
4. Documented lack of physicians serving indigent or Medicaid patients within the service area
5. Expanded healthcare services to the community, furthering a hospital's educational/research programs, expanding service areas, providing services to the hospital, or enhancing efficiencies and productivity
How do I use my plan?

- Anticipate push-back from medical staff and others
  - You can’t always get what you want – barriers include political, cost, and supply

- SMART goals
  - Specific, Measurable, Attainable, Realistic, Time-limited
  - If you can’t pursue all needs demonstrated by your plan, use SMART goals to help focus your recruiting efforts

- How often do I need to complete a plan in order for it to be useful?
  - Every 3-5 years
  - Mini updates in between

Questions & Comments

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