



# Certificate in Physician Leadership for Hospital Medicine Capstone Project

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August 6, 2017

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# EXECUTIVE SUMMARY

## Objective

To create an Inpatient Medicine Group structured to provide sustainable, scalable, high quality, and financially feasible patient care for hospitalized patients, while providing appropriate supervision and oversight for medical residents training in Magnolia Regional Health Center's GME programs and maximizing physician satisfaction/wellness for hospitalists.

## Problems

A needs assessment conducted by the GME department and MRHC senior administration in collaboration with an independent third-party consulting firm revealed the following concerns:

- Current staffing model fails to define consistent responsibilities, scheduling, or performance and productivity expectations for "hospitalist" roles
- Compensation is not consistent with regional benchmarks, was last updated in 2013, and fails to incentivize productivity or performance
- Current staffing model is not scalable to meet future patient volume increases from increased demand for services from internal medicine hospitalists

## Solutions

Broadly, the proposed solutions are as follows:

- Restructure hospitalist contracts to include a base shift compensation rather than annual salary
- Clearly define productivity and performance expectations for the group
- Modernize hospitalist compensation to include group productivity and performance incentives
- Clearly define volume thresholds designed to activate staffing expansion and physician recruitment
- Ensure adherence with ACGME standards by providing appropriate stipends for faculty members

## Project Outline

The following topics are discussed herein:

- Needs assessment: overview of current inpatient, ambulatory, and GME environments
  - Literature review
  - Physician compensation and budget estimates
  - Performance metrics
  - Proposed growth strategies for inpatient medicine group
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## DEFINITION AND SCOPE

### Overview

Growth of adult inpatient volume at Magnolia Regional Health Center, decreased number of community physicians choosing to admit their own patients, and new demands of ACGME accreditation all contribute to the need for restructuring of the internal medicine hospitalist service. Multiple problems such as a lack of clearly delineated responsibilities, non-competitive compensation, and lack of scalability render the existing model suboptimal. Our project is to determine the institutional needs, study current market trends, and propose a modern and sustainable internal medicine hospitalist group structure to senior administration.

### Goals

The primary goal is to provide a foundation for developing an internal medicine hospitalist staffing model and compensation structure to be implemented on July 1, 2017. Secondary goals include: provide analysis for appropriate performance and productivity benchmarking, and to provide a staffing model for future growth of the program.

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# METHODOLOGY

## Needs Assessment

Magnolia Regional Health Center contracted with an independent third party consulting firm (SalientMD) to assess current processes, staffing, and financial feasibility of the hospitalist group. This data, combined with evaluation of the Internal Medicine Residency Program needs is outlined as follows:

### *Inpatient Clinicians*

The current GME-based hospitalist group is comprised of the Program Director, six Core Faculty Hospitalists, two Nurse Practitioners, and a GME department physician who splits time between the inpatient and outpatient settings. As pertains to the inpatient clinical setting, this is equal to seven FTE physicians (six hospitalists, ½ FTE for PD, ½ FTE for physician who splits time) and two FTE nurse practitioners.

Separate from the hospitalist service, the majority of remaining adult primary care services in the hospital are provided by three community physicians with admitting privileges at MRHC, who sometimes employ nurse practitioners for assistance.

### *Estimated Volume*

After engaging SalientMD in June 2016, the accuracy of data for inpatient volume attributable to the hospitalist services is much improved; although without a full year of data to assess seasonal fluctuations, volume estimates remain somewhat limited. Based on the most recent data over a four month period including two “slow months” and two “busy months” (October 2016 through January 2017), the hospitalist program currently averages about 55 billable encounters per day and 110 wRVU per day. This volume estimate does not include volume generated by the IM Program Director (which is predominantly ICU care), or encounters for procedures.

### *Intensive Care Unit*

MRHC currently functions with an open ICU, and there is no publicly discussed plan in place to change this structure. The hospitalist service cares for the majority of patients admitted to the MICU, and Dr. Pizzimenti supervises the residents for these patients on Monday-Thursday (a hospitalist covers this census in addition to a med/surg team on Friday-Sunday and when the IM Program Director is on PTO/CME). Primary care needs in the SICU are provided by the hospitalists via the residency service teams.

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There is ongoing discussion of the need for enhanced Intensivist support in light of the medical staff currently having only 2 pulmonary/critical care physicians and due to hospital bylaws structure not providing 24/7/365 coverage. Surgical specialties including CV Surgery have expressed that enhancing Intensivist staffing would improve outcomes and allow them to perform more operations. Additionally, expansion of the number of ICU patient encounters would need to occur if the IM residency program were to eventually increase its size from 18 to 36 residents; likely needing to add a second ICU rotation in the SICU. It is unclear if adding additional Intensivist support would provide a transition to a “closed” ICU or provide required comanagement of critically ill patients; either option appears reasonable.

#### *Ambulatory Assessment*

The Magnolia Regional Community Care Clinic (MRCCC) currently serves as the source of required “panel” patients for the Internal Medicine Residency per ACGME requirements, as well as a safety net facility to provide ambulatory care for indigent patients. This is staffed by one full time director within the GME department 3 days per week, and one GME department physician 2 days per week. This is equivalent to one FTE for the ambulatory setting. Any day that both of these attending physicians are unable to work (PTO, CME, etc.), a hospitalist provides supervision for both the MRCCC and for a portion of hospitalist service patients. At this time, all patients evaluated in the ambulatory setting are cared for by an internal medicine resident with an attending physician supervising and billing for the encounters.

Outside the GME environment, ambulatory care is provided in the community by the three physicians previously mentioned who have traditional primary care practices, along with three Internal Medicine physicians, two Family Medicine physicians, and a host of nurse practitioners.

#### *GME Department*

In addition to standard clinical support, the GME department currently needs physician assistance with many aspects of the clinical learning environment to remain successful. These activities include, but are not limited to, leading daily morning report, daily noon conferences, and daily case presentations along with other learning activities. Combined, these activities require faculty support of a minimum of 3 hours per week day for all daytime clinical faculty. Additionally, the transition to ACGME accreditation necessitates a myriad of extra administrative constraints (evaluations, committee participation, scholarly activity, lecture preparation time) on the faculty members. In all, a minimum of 15 hours per week (and more reasonably 20 hours per week) of the current hospitalists’ time is allocated to non-clinical academic responsibilities.

Notably, the current GME Department supports an IM residency program and cardiology fellowship program. There are discussions of growth strategies in two ways: 1) diversify the program offerings (namely by adding an ER residency program), and 2) expand the size of the existing programs (namely by

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increasing the IM residency program from 18 to 36 residents). Both of these opportunities for growth require years of planning, infrastructure development, and faculty preparation. It appears both of these growth strategies, if approved, are a minimum of 3 years, and more realistically 5 years from fruition.

## Literature Review

As the flagship organization for physician compensation surveys, Medical Group Management Association (MGMA) joins the Society of Hospital Medicine (SHM) to jointly release the biennial State of Hospital Medicine report<sup>1</sup>. This was last released in 2016 and provides valuable data. As each hospital is unique, and each physician has a unique role in the inpatient setting, there is no identical setting to that of MRHC; however, some important benchmarks exist regarding fair market value for compensation, productivity expectations, and billing/collections information.

### *Compensation*

In the Southern Region, the median compensation per FTE was \$302,237 (\$391,553 was 75th percentile). Notably, the compensation figures do not include benefits (valued at a median of \$30,000) and retirement plans (valued at a median of \$30,000). Compensation among hospitalists is 79.5% base pay, 14.7% production incentive, and 5.7% performance incentive.

### *Production*

There are three generally accepted views of production: patient encounters, wRVU, and some version of charges/collections. For hospitalists, in the setting of variable payer mix, and not all encounters having the same degree of complexity, wRVU is the standard for productivity measurement. The median physician wRVU for the South Region was 5248 (6524 was 75th percentile). The median collection to wRVU ratio was 46.83 (53.07 was 75th percentile).

### *Practice Structure*

Median FTE physicians per group is 9, and 64.6% of groups also have NP/PA support. Hospitalists work 182 shifts per FTE physician with 38.1% in 7on/7off staffing (30.9% Monday-Friday). Less than half of programs have a formal back up coverage system for PTO/absences (only 17.2% have mandatory participation in backup coverage). Night coverage is provided on site at 84.3% of programs with 72.3% employing nocturnists.

### *Financial Subsidy*

Naturally, in the setting of variable payer mix, uncompensated care, and numerous non-billable benefits hospitalists provide the institution, 96.3% of hospitalist programs reported receiving a financial subsidy. The median subsidy nationally was \$157,535 per FTE for programs caring only for adults.

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Patient safety data as it pertains to hospitalists is largely survey-based and anecdotal from large management organizations. Additionally, this is facility-dependent due to variability in workflow systems, EMRs, and case mix. Most data suggest physicians prefer about 15 patient encounters per day and that patient satisfaction, readmission rates, physician satisfaction, adjusted length of stay, and other quality metrics suffer when hospitalist groups exceed 18 encounters per day per FTE<sup>2,3,4,5</sup>. For Intensivists, data is even more limited, but a recent study in the UK published in JAMA suggested 7.5 patients per shift was optimal<sup>6</sup>.

MRHC's transition from an AOA accredited GME department to an ACGME accredited institution was a necessary undertaking for the future of MRHC. This transition offers many future benefits; however, the vastly different ACGME standards are well known to be more costly for the institution. There are specific provisions regarding dedicated academic time requirements for core faculty and directorship positions within the department. Specifically, core faculty must have 15 hours per week in dedicated academic time, and this time should receive financial support from the institution. Associate Program Directors must have at least 20 hours per week in dedicated academic time with financial support, and Program Directors must spend at least 50% of their time in the academic interest with financial support.

### **Data Collection**

An independent third-party consulting group, SalientMD, was contracted and collaborated with the MRHC billing department to determine volume, wRVU, and other financial data.

### **Business Proposal and Negotiation**

A comprehensive 16 page business proposal was developed with input from current internal medicine hospitalists, SalientMD, and GME department administrators. This proposal was presented to senior administrators to initiate discussions of restructuring the internal medicine hospitalist group. After review, several months of negotiation, legal counsel, and contracting ultimately led to implementation of a restructured internal medicine hospitalist group on July 1, 2017.

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# RESULTS

## Implementation of New Hospitalist Medicine Group Structure

The new internal medicine hospitalist group structure was implemented at MRHC on July 1, 2017. The following are some highlights of the enhancements in the new structure:

### *Transition to Shift Pay*

Paid Time Off (PTO) was a point of ongoing contention in our program — the hospital didn't want to provide it, and the hospitalists wished they could be compensated for unused days. Additionally, the hospital needed a way to properly account for the staffing expense of each shift. The end result was to transition compensation from annual salary to shift pay. This allows hospitalists the flexibility to choose how many shifts they work (within expected scheduling parameters and minimum shifts to maintain full time status) and be compensated for them, while eliminating PTO.

### *Increased Hospitalist Compensation*

To offset the elimination of PTO, overall compensation was increased by approximately 8%. This means that a hospitalist working 168 shifts per year would earn the same income as was provided with the prior annual salary — in essence equal work for equal pay. Additionally, should a hospitalist work a full 182 shifts per year, the annual compensation would be more in line with the median compensation according to SHM/MGMA data.

### *Shift Differential for Nocturnists*

Implementation of a shift differential (18.75%) for nocturnists to recognize the challenges that come with this position, and to incentivize current hospitalists to fill open nocturnist shifts. This shift differential also brings full time nocturnist compensation in line with the median compensation according to SHM/MGMA data.

### *Performance and Productivity Metrics*

Historically, the hospitalist group did not report performance or productivity metrics to its hospitalists, and this was not proactively monitored at the group level by senior administration. We developed a series of outcomes-based metrics consistent with the priorities of the Board of Trustees Quality Subcommittee, as well as process-based metrics to ensure department compliance and continuous improvement. These metrics are now reported at the monthly department meeting, and quarterly to senior administration at the Graduate Medical Education Committee meeting.

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### *Increased Ambulatory Staffing*

To streamline hospitalist scheduling by eliminating the need for dual-role physicians (inpatient and ambulatory), and improve the continuity clinic experience for IM residents, an outpatient IM physician combined her practice with the MRCCC and joined the ambulatory IM faculty. This stabilized hospitalist shift scheduling to improve continuity for patient care and resident supervision, as well as to improve hospitalist satisfaction.

### *Physician Quality and Revenue Cycle Liaison*

To ensure continuous process improvement in both healthcare quality and revenue cycle processes, a leadership role was created for one hospitalist to be responsible for collecting and reporting data relevant to the new performance and productivity metrics and to integrate these processes bilaterally between the general hospital environment and the GME department consistent with the ACGME CLER initiative.

### *Additional Daytime Hospitalist*

To ensure scalability and adequate supervision of the nurse practitioners working with the hospitalist group, a Monday-Friday daytime hospitalist position was created. As the nurse practitioners predominately care for comanaged surgical patients in the postoperative setting, Monday-Friday is the peak time for that hospitalist team. This was a perfect fit for the newly-created leadership position to assume this role, as the Monday-Friday schedule allowed for appropriate collaboration with administrative staff.

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## DISCUSSION AND IMPACT

Every healthcare system is unique, and as a 200 bed rural community hospital with an independent ACGME-accredited IM residency program, MRHC is certainly unique. The internal medicine hospitalist group and IM residency program are often viewed as synonymous in the eyes of general medical staff and administrators, and hospitalists and core faculty are also synonymous. Without the benefit of a non-teaching hospitalist service to shoulder high volume, hospitalists at MRHC are often asked to balance teaching while still caring for patient volumes more in line with non-teaching hospitalist services — all in a rural setting with little comparison data. These circumstances led to a complex polarity of “fair” compensation and volume expectations between hospital administrators and hospitalists. Ultimately, senior administration was able to achieve their goal of consistent cost allocation for staffing and elimination of PTO in its textbook form; while hospitalists were able to achieve a standard shift pay that incentivizes extra work and rewards those who work undesirable shifts. Perhaps most importantly, the new streamlined schedule and shift pay allow for a very scalable structure to accommodate future growth and short term fluctuations in volume or staffing shortages.

As this new hospitalist group structure was implemented on July 1, 2017, some of the effects are yet to be seen. For example, we will assess whether better attending-physician continuity of care impacts year over year patient satisfaction scores. Next, we will assess responses to questions specific to resident continuity clinic experience and satisfaction with work-education balance on our annual ACGME and internal GME department surveys. Additionally, we will assess changes in physician satisfaction on the aforementioned surveys. Finally, we hope to engage senior administration in adding a performance and productivity incentive to the compensation package in the near future.

Overall, we feel the restructured hospitalist group schedule, structure, and compensation will provide a sustainable, scalable, high quality, and financially feasible way to provide patient care for hospitalized patients, while providing appropriate supervision and oversight for medical residents training in Magnolia Regional Health Center’s GME programs and maximizing physician satisfaction/wellness for hospitalists.

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## COMMENTS FROM ADVISOR

"It is very important to understand the needs and requirements of any hospitalist program in order to be able to develop and improve. Naturally, as these needs and requirements can change, it is important to have a mechanism to monitor and engage in further improvements. The project by Dr. Morris has thoroughly researched all the aspects pertaining to his unique program, got everyone involved and addressed these aspects in a fashion that satisfied all the stakeholders. The new ideas and mechanisms suggested to monitor outcomes and report data are the cornerstone for sustainability of continuous progress and ways to improve.

I would like to congratulate Dr. Seger Morris for this solid work and comprehensive project and I look forward to follow up with him over the next few years regarding the outcome of this implementation and whether this model was adopted/modified by other facilities."

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