Using M3App© for Faculty and Resident Peer Documentation of Milestones and Faculty Feedback (F3App©)

Cristen Page, MD, MPH
Pam Vnenchack, MD
Alec DeCastro, MD

AMERICAN ACADEMY OF
FAMILY PHYSICIANS

Disclosures

- Since the pilot study was completed, Dr. Page has joined the Board of Directors for the non profit, Mission3, to which the M3App is licensed.

AMERICAN ACADEMY OF FAMILY PHYSICIANS

Objectives

- To share one strategy to facilitate quick and meaningful documentation of milestones
- To demonstrate that we see most milestones in every day residency teaching
- Share lessons learned to facilitate faculty development, efficiency, and meaningfulness for a collaborative milestones project
- To build further opportunities for collaboration
- Share a strategy to increase point-of-care feedback from residents to faculty
- Encourage peer evaluation among residents

Background

- ACGME Milestones and SOM Milestones
  - Electronic evaluation systems
  - Time consuming, cumbersome mobile interface
  - Difficult to access at point of care
- Recall challenges
- Many programs adding assessments to help document, adding time and cost to training
  - OSCEs
  - Direct Feedback Forms (e.g. "Field Notes")
- Decision to develop "M3App" for point of observation documentation
  - Goal = efficient and useful

Original Setting

- UNC Family Medicine
  - 11/11/11 Program
  - 50+ faculty teaching in 2 FMC sites
    - 29 preceptors in main FMC
  - Almost all faculty teach inpatient and/or MCH service settings
- Strong statewide network of FM programs
  - 4 current Medical Schools
  - 12 FM Residency Programs
  - UNC Statewide Department
  - NC AHEC
  - NCAFP

Goals of M3App

- Decision to develop "M3App" to facilitate point of observation documentation
  - **Goal = Efficient and Useful**
- Record Milestones quickly & accurately
- Improve quality, frequency & efficiency of written evaluations
  - Narrative driven approach, behavior specific linked in time and situation
- Facilitate descriptive comments from faculty with varied knowledge of milestones
  - "great job" ; "read more" is not helpful!
- Aid in the work of the CCC
  - Mechanism that supports aggregation of data for each resident

Mobile Medical Milestones (M3App)

- Web-based application, functions like app on mobile device
- Can be accessed from any device (smartphone, tablet, PC)
- Secure, encrypted data
- Individual administrator "site" for each program
- Varied access levels (site administrator, app user, etc)
- Multiple reporting functions
  - Individual resident by milestone
  - Faculty usage
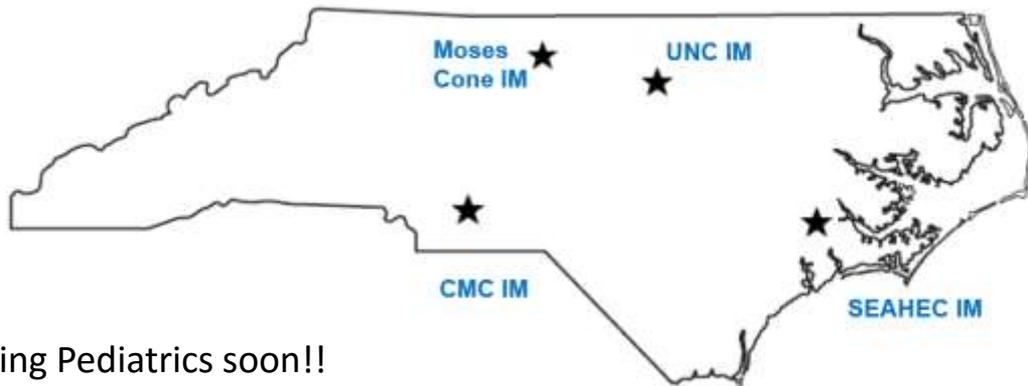 - Resident milestone observation counts

8 North Carolina Programs Participating in Original Pilot

Internal Medicine Expansion Pilot

Adding Pediatrics soon!!

Current M3App Programs (#30)

Sample National FM Programs
- **Bronx-Lebanon Hospital, NY**
- **Lancaster General Hospital, PA**
- **University of Virginia, VA**
- **Anmed Health, SC**
- **Medical University of South Carolina, SC**
- **University of South Carolina, SC**
- **University of Alabama Birmingham, AL**
- **Beaumont Hospital, MI**
- **University of North Dakota, ND**
- **Lincoln Medical Education Partnership, NE**
- **University of Kansas, KS**
- **Saint Joseph Hospital, CO**
- **San Joaquin General Hospital, CA**
- **Duke University, NC**
- **Florida (joining soon)**

Mission3

Educational Nonprofit

Board of Directors

Clark Denniston, MD (Chair)

Cristy Page, MD, MPH (Vice Chair)

Warren Newton, MD, MPH

Steve Ratcliffe, MD

Amir Barzin, DO

Plus representatives from Rural Health, Journalism, Business, and law (www.mission3.org)

Recent feedback:

- From one faculty (new M3 program)

"So, we did the Milestone game for the first time this week. We had a lot of good discussion around it and we even had one of the residents go to their advisor later that day and ASK to go over their milestones!! Exciting!! I'm planning to do the Milestone game again in the spring. "

- From Program Director at UNC Internal Medicine:

"We love it so far. I just used it for the CCC meeting today, it does make sorting all of the narrative feedback and evaluations so much easier (it does that for you), and shows us areas in which we need to improve upon observing and documenting the observations for residents. "

- From a prospective program:

" Ever since I heard the presentations at I3 and PDW (regional and national conferences) I have been excited about this. How do we sign up? "

Grant Support

M3App© and F3App© are made possible by non profit structure and grants from:

- NCAHEC
- NC Academy of Family Physicians
- Private Foundation in the Carolinas
- UNC Kenan-Flagler Award

These slides are for new M3App programs and are not to be shared or reproduced without permission.

Two Recent Articles

Journal of Graduate Medical Education®

Learnings From the Pilot Implementation of Mobile Medical Milestones Application

Family Medicine
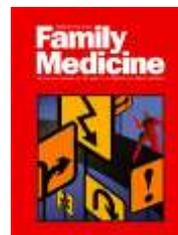
Piloting the Mobile Medical Milestones Application (M3App©): A Multi-Institution Evaluation

M3App Benefits

- Efficient point of care tool—takes 20-90 seconds for entry!
- Easy to load button on your smart phone– functions like an app
- Allows you to capture your thoughts in the moment! DICTATE or type!
- Provides faculty development while you are using it!

For your faculty

- Improves quality and frequency of written comments from faculty
- Provides monthly and bi-annual reports of faculty observations, linked to milestones
- Promotes personal engagement in asking for feedback and ensuring proper documentation of your milestones development

For your residents

- Reporting functions allow for quick sorting of resident milestones, by resident over time, by milestones sub-competency
- Improves efficiency of the CCC
- Improves quality of evaluation process through enhanced specificity and timeliness of written feedback
- Option to use the high volume (all in) approach for maximal benefit or to use the "fill in the gaps" approach for milestones not easily captured in your current evaluation system
- Opportunity to work collaboratively with other programs in evaluation and scholarly work—don't go it alone!
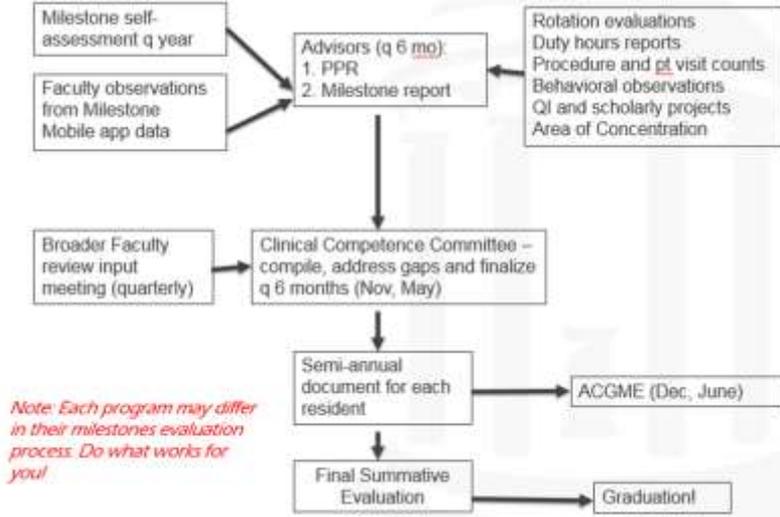
For your program

M3App Mobile Interface (DEMO)

Why no 1-5 rating system?

- To keep simple, user friendly, efficient
- One encounter not enough for complete assessment
- Avoid tendency of evaluators to rate everyone high without providing substantial feedback
- To provide meaningful feedback as requested by residents
- Mechanism to collect multiple data points over time
- Paint a picture of resident performance over time
- Used by CCC, PD, advisors in conjunction with other evaluations to determine numerical rating

Residency Program Implementation

- Individual program set up, admin control over program site
- Initial faculty development
  - Clear expectations for frequency/expectation of use
    - E.g., 1 observation per learner per session
  - Use it, don't worry about quality initially
  - Share early successes and examples in faculty meetings
  - Present data to residents → enthusiasm builds further success
- Secondary faculty and resident development (UNC)
  - Milestones trivia game
  - Target individual faculty (low utilizers)
  - Milestones use ratio/faculty

UNC FM Resident Evaluation Flow

Milestone self-assessment q year

Faculty observations from Milestone Mobile app data

Advisors (q 6 mo):
1. PPR
2. Milestone report

Rotation evaluations
Duty hours reports
Procedure and pt visit counts
Behavioral observations
QI and scholarly projects
Area of Concentration

Broader Faculty review input meeting (quarterly)

Clinical Competence Committee – compile, address gaps and finalize q 6 months (Nov, May)

Semi-annual document for each resident

ACGME (Dec, June)

Final Summative Evaluation

Graduation!

Note: Each program may differ in their milestones evaluation process. Do what works for you!

Milestone Reports

Examples from MCH Service

C1. Develops meaningful, therapeutic relationships with patients and families Aug. 4, 2014 Ashley Rietz	Quickly developed rapport with a newborn pt's family with a complicated hospital course. The entire family is establishing with her.
SBP 4. Coordinates team based care July 19, 2014 Cristy Page	On MCH call I observed her interact with pharmacy, nursing, a Peds hospitalist, and ob physicians in addition to her patients. In all interactions she projected competence, listened to the needs and concerns of the other parties, and fostered excellent teamwork.
PROF 4. Maintains emotional, physical, and mental health and pursues continual personal and professional growth July 20, 2014 Cristy Page	I had a nice reflection with her about adjusting to being a mom and balancing her high patient care and learning standards with being a good mom and wife. She is remarkably mature in her approach; and though it is challenging, she is somehow pulling off pumping and tending to her family while also giving it her all for her patients.

Clinic, Clinic, Clinic

PC3. Partners with the patient, family, and community to improve health through disease prevention and health promotion Aug. 17, 2014 Jodi Roque (Also Professionalism)	Jumped in to see a new patient when a 3rd year was very behind in clinic (after she finished seeing consults with the psychiatrist). She saw this patient as a learning opportunity and is very excited about partnering with this new patient who will be coming back for a well woman exam.
PC2. Cares for patients with chronic illnesses Aug. 30, 2014 Cristy Page (also C1: Develops meaningful, therapeutic relationships with patients and families)	Cares for a family with multiple chronic illnesses and partners with them to care for the father as a team. 7 of them live in a small apartment together and Resident X cares for them with a family centered approach. Spoke to patient (who has dysarthria) in a way that was fully respectful and patient.

Hospital Service

PC1. Cares for acutely ill or injured patients in urgent and emergent situations and in all settings July 17, 2014 Kathy Barnhouse	I was on fmis call on her fourth night on call as an r2. She had a new psych intern and a brand new AI. She triaged 7 ill patients between 5:30 pm and 10 pm and managed a complex patient on the floor with chest pain. She only became slightly overwhelmed but maintained her composure and professionalism in addition to appropriately managing each patient with appropriate minimal guidance from me. In addition, she found teaching points to discuss with the psych resident and AI on their patients.
PBLI 2. Demonstrates self-directed learning July 19, 2014 Kelly Bossenbroek Fedoriw	During a slow call night he showed excellent self directed learning by volunteering with nursing to start IV's on floor patients that needed an IV placed.

General Results (Pilot)

- Majority of respondents overall rate M3App positively in all categories
  - Proportion reporting that current system provides easy documentation of milestones increased 25%-63%
- Most faculty members found the M3App to be well designed and easy to use
  - Ease of use 81% overall
- Higher utilization = more favorable review of M3App
  - Positive 'dose-response'
- Faculty comfort with M3App related to residents' perceived increase in quality of observations
- Proportion of faculty using mobile device to evaluate learners increased in all programs

Key Findings - Qualitative

- Key themes from PDs and open ended comments
  - Efficiency and compilation of milestone data
  - Specificity of milestone documentation
  - Immediacy/Point of Care
  - Resident Receptivity
    - Positive feedback loop when residents were engaged
    - Positive resident response
  - Motivation of Learners and Faculty
    - Variations between high volume, low stakes vs gap filling approach
  - Faculty Development/Education
  - Value of Collaboration

Preliminary Conclusions

- M3App improved both quality and efficiency of resident feedback, CCC
- Faculty and residents value specific examples, which is a 'best practice'
- M3App a tool for faculty development
- M3App may help with Generation X residents need for immediate feedback
- Improves transparency – why residents receive a certain level on milestones
- Collaboration of regional training network aids implementation
- Barriers include lack of physician champion and competing demands (Change management strategies are key!)

M3App© for Peer Documentation

- Allow residents to use M3App for peer to peer observations (in addition to medical student observations)
- Further facilitates documentation of milestones
- Promotes culture of evaluation
- Further engages residents in milestones/educates residents on milestones

M3App© for Peer Documentation

- Multiple programs piloting it's use
- Wake Forest and UNC from the start
- MUSC and Lancaster
- Initial feedback from residents positive
- (examples)
- Formal evaluation underway

New Solution-focused product: F3App©

- Faculty Feedback Facilitator (F3App©)
- Development of F3App to allow residents to submit point-of-care feedback on faculty
- Useful for faculty evaluations and faculty development
- Piloted in one large academic program
  - Largest source of descriptive feedback for faculty teaching portfolios
- Anonymous
- Promotes culture of feedback

New Solution-focused product: F3App©

- Development for broad distribution underway
- Initial pilot with open ended narrative description
  - Debate among programs regarding value of agreed upon teaching competencies
- Priority given to current programs at go live
- Grant funding pending, development/pilot testing over spring and go live Summer 2017.

Take Home Points

- We see most milestones in everyday teaching
- Milestones should be meaningful to our learners
- M3App is one way to facilitate quick documentation and improve efficiency
- Peer observation with M3App aids in documentation of milestones
- Resident feedback of faculty through F3App© shows great promise
- There are benefits from collaboration!
  - Evaluate M3App and F3App beyond a single department
  - Learning Together re: Milestones Implementation
  - Faculty Development
  - Community Building

Program Director Panel

About Mission3

Mission3 is an educational non-profit spin out of the University of North Carolina.

Through Mission3, we aspire to motivate, mentor, and matter to the greater good. Join us in our effort to raise the bar through technology in medical education!
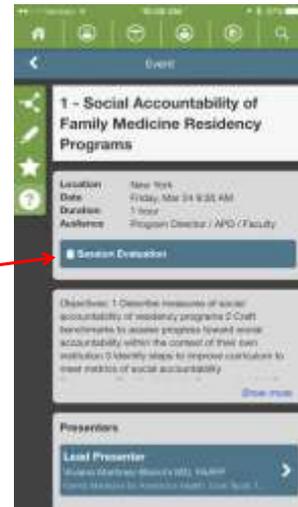

Interested in more info about M3App© or F3App©?

MOTIVATE . MENTOR . MATTER

- Contact: info@mission3.org
- M3App Sites:
  - www.m3app.org
  - www.mission3.org
- *Mobile Medical Milestones and the M3App are Copyrighted 2013 by C.Page at the University of North Carolina Department of Family Medicine*

Please…

Complete the session evaluation.

Thank you.