

# Planning Process for Advanced Clinical Access in Navy Military Treatment Facilities

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## INTRODUCTION

This case study examines the evolution and output of an Integrated Process Team (IPT) chartered by the U.S. Navy Bureau of Medicine and Surgery (BUMED) in August 2004. The IPT's progress is tracked through mid-January 2005 and concentrates on the initial planning steps leading up to field testing of its end product. Current literature and the author's (also a member of the IPT) analyses are offered as a framework for critiquing the IPT's efforts. The scope of the case study is intentionally limited to the planning and policy formulation process. This is because all health care facilities attempting advanced clinical access will undergo the same or similar set of questions, while the actual beta-testing and subsequent full-scale adoption of specific procedures will vary based on each facility or health care system's uniqueness. The intent is to study the process by which the "corporate level" of a health care system establishes a set of common rules to hand over to its member hospitals and clinics.

Advanced clinical access (also known as "open access" or "EZ access") is a concept that has been tested and proven effective for several years<sup>1,2,3</sup>. Open access (OA) is a model in which patients calling to schedule an appointment are offered an appointment the same day. The BUMED IPT expands this definition. If a same-day appointment is not available, the patient will be offered a choice of appointments within the primary care access standard of 72 hours for an acute condition or one week for a routine condition. If the patient accepts an appointment for the same day or within the third appointment offered within the access standard, then the "EZ access" goal is considered achieved. Regardless of how strict the definition is, seven elements are considered essential to a successful advanced clinical access program: 1) balancing supply and demand, 2) reducing backlog, 3) reducing the variety of appointment types, 4) developing contingency plans for unusual circumstances, 5) working to adjust demand profiles, 6) increasing the availability of bottleneck resources, and 7) strong leadership investment and support<sup>4,5,6</sup>.

Analyzing and applying each of these seven factors is especially difficult in a military setting. Utilization of services at military health facilities is generally higher than in the civilian setting

due in part to low “time price” costs, no out-of-pocket costs for primary care, occupational and readiness requirements for active duty service members, and the implementation of the Tricare for Life program to increase access for retirees over age 65<sup>7</sup>. The supply side of the equation is affected by recruitment and retention issues, lost provider and support staff availability in clinic due to readiness and deployment requirements, routine change of duty stations of providers, and facility constraints that limit the efficient flow of patients through the clinics. Though efforts in demand management are being initiated, Navy Medicine must still address its immediate access to care and patient satisfaction issues.

#### FORMATION OF THE BUMED “EZ ACCESS” IPT

In July 2004, the Navy’s Bureau of Medicine and Surgery Executive Steering Committee chartered an IPT to “develop policy, guidelines, implementation instructions, education plans, measures of success, and feedback/measurement mechanisms.” The “deliverables”, or end products, of the IPT were: 1) define EZ access appointing – July 2004, 2) conduct OA data call/study of current practices and performance – July 2004, 3) determine if EZ access is the optimal approach for Naval Medicine and specify which clinics (primary care and specialty) are most appropriate for EZ Access. - August 2004, 4) develop performance metrics, including data sources and presentation methods – August 2004, 5) develop standard policy and business rules – September 2004, 6) develop corporate strategy for implementation of EZ Access across Naval Medicine September 2004, 7) revise BUMED Business Planning Tool “Access to Care” Module – October 2004, and 8) identify pilot test site(s) and implement testing - October 2004.

Team membership consisted of four BUMED staff from the Health Care Operations and Resource Management divisions, representatives from each of the three Healthcare Support Offices (an intermediary level between BUMED and shore medical treatment facilities), a representative from one of the Multi-Service Marketing Offices (a tri-service office to oversee regional managed care operations), 6 hospital and clinic representatives, and one representative each from the Naval Medical Education and Training Command and Medical Inspector General staff. No overseas locations were included. Meetings were held on a regular basis via teleconference. Team progress was to be reported to the BUMED Operations Council each month by the IPT Chairperson. The duration of the IPT was set at 4 months.

### IPT PROGRESS ON THE "DELIVERABLES"

Items (1), (3), and (4) were readily accomplished. The definition, adapted from the civilian community, was agreed upon as "patients are offered a same day appointment or a choice of a future appointment within access standards". EZ access was seen as the proper direction for primary care based on an expected increase in relative value units (RVUs) and an expected decrease in visits per beneficiary per year. The IPT arrived at the following ten measures of success:

- 1) unmet demand = % of time when the clinic was not able to offer a patient an appointment that met their requirements,
- 2) visits/beneficiary/year = # of primary care encounters (excluding phone consults) per beneficiary per year,
- 3) time to 3<sup>rd</sup> available appointment = Time in hours until three appointments are available on the clinic schedule,
- 4) PCM Match = % of primary care encounters where a patient sees his or her PCM,
- 5) phone abandonment rate = % of calls that are abandoned by beneficiary before being answered by MTF staff,
- 6) patient satisfaction = % of patients reporting access as "outstanding" or "very good",
- 7) panel size = number and mix of patients in a PCM panel,
- 8) Relative value units per 8 available hours,
- 9) visits per 8 available hours, and
- 10) clinical hours per provider per week.

The metrics were borrowed from another BUMED project to develop a broad, system-wide set of BUMED-level "Dashboard" metrics. In addition to the time saved, the advantage of borrowing from a concurrently evolving set is the ease of integrating an analyzing EZ access success as a contributor to other metrics analyzing satisfaction, productivity, readiness, and financial performance. The fourth metric (PCM match) and the last four measures are easy to obtain, but will add little value in determining business rules when viewed in the context of the seven success factors previously listed (balancing supply and demand, reducing backlog, reducing the variety of appointment types, developing contingency plans for unusual circumstances, working to adjust demand profiles, increasing the availability of

bottleneck resources, and strong leadership investment and support).

The patient satisfaction metric is obtained from the official Department of Defense survey, which is limited by its small sample size, lag time of approximately six months between the patient encounter and the reporting of the patients' satisfaction, and the inability to spotlight a particular department of a facility. Panel size is relevant only if patients remain assigned to a particular provider over a reasonable period of time. Real world experience is that patients are continuously reassigned, often without the patient being informed. Under these circumstances, striving for a patient-PCM match and monitoring panel size is non-productive. Provider availability and productivity measures become irrelevant when designing an open access system because 1) data quality for coding and monitoring provider time allocation is flawed, though improving, and 2) implicit in open access is that same-day access places a priority on filling vacant appointment slots regardless of provider over achieving a high patient-PCM match rate. The remaining metrics, however, will be extremely valuable.

#### BASELINE DATA COLLECTION: FINDING THE "AS IS"

To gather data on actual field practices, the IPT identified a mix of facilities by size and geographic location (all within the continental United States). The IPT developed a list of standard questions to ask the facilities via a telephone survey. The survey sample was stratified into the following categories: 2 medical centers (full service tertiary care), 2 family practice teaching hospitals, 3 hospitals (other than above), 2 ambulatory care clinics (aka NACC) or medical clinics (outpatient facilities with primary care and limited specialty care), and 2 branch medical clinics (geographically separated branches that fall under a larger "parent" hospital or clinic).

Phone interviews were coordinated between team members and the surveyed command. The facilities surveyed were Naval Medical Center, Portsmouth, VA; National Naval Medical Center, Bethesda, MD; Naval Hospital Pensacola, FL; Naval Hospital Bremerton, WA; Naval Hospital Cherry Point, NC; Naval Hospital Beaufort, SC; Naval Hospital Lemoore, CA; Naval Medical Clinic Annapolis, MD; Naval Medical Clinic Pearl Harbor, HI; Branch

Medical Clinic Sewell's Point, VA (outside Naval Operating Base Norfolk, VA); and Branch Medical Clinic Mid-South (Millington, TN).

The chosen sample was well thought out, but with two noteworthy weaknesses. Strengths provided by this particular list included 1) excellent geographic diversity, and 2) a good balance of fleet concentration areas, "land-locked" areas with stable populations, student training commands (Beaufort and San Diego). One of the overlooked but significant areas, however, is the need to distinguish between the "parent" facility's practices and the reality of the "child" clinics. In the process of site identification and in the development and approval of survey questions, no effort was made to distinguish, for example, between appointment practices at Naval Hospital Beaufort's main facility and its two branch clinics, one serving recruits and drill instructors at Marine Corps Recruit Depot Parris Island, and one serving the aviation community at Marine Corps Air Station Beaufort. This lack of specificity creates room for interpretation by the medical facility, allowing for the branch clinics—which tend to have more same day appointment and walk-in capability—to skew the data, depending on the facility's decision to include them in their answers. Another issue is the availability of an emergency department. History shows that patients will utilize emergency departments for acute conditions, which bypasses the need to call for an "EZ access" appointment.

The questions are relevant and well-written, but in light of BUMED's mandate to "develop a standard set of OA business rules, policies, and metrics" and its statement that "since improved access is one of nine required initiatives in MTF business plans, specific guidance on EZ access will assist MTFs in attaining their business objectives", actual data collection from the field on their current status is arguably moot. Open access may be interpreted as an unwritten expectation for MTFs versus an option, especially if the patient populations are pleased with open access where it is implemented. The questions then become 1) input to the BUMED IPT for business rule formulation by identifying areas for emphasis and training, and 2) a list of thoughts for clinic managers and mid-level management to conduct a small scale self-assessment. The IPT could have saved time by developing a generic draft set of business rules and metrics, submitting it to the field for a brief comment period, and finalizing a set of business rules to be beta tested based on field recommendations and "best practices" at existing open access clinics and recommendations.

## BUSINESS RULES

The IPT charter called for the team to “develop standard policy and business rules”, “develop corporate strategy for implementation of EZ access across Naval Medicine”, and identify pilot test site(s) and implement testing phase”. The IPT’s next step was to write an Implementation Guide with the following chapters: 1) Clinic Preparation (self- evaluation: Capacity Analysis, ii. Demand Forecasting, iii. Evaluation Worksheet), 2) Appointment Utilization, 3) Template Management, 4) Profile Management, 5) Unmet Demand Reporting, 6) EZ Access Business Rules, and 70 References/Training.

The two most interesting sections of the Guide are the demand forecasting and business rules. Navy Medicine has had its facilities analyze their capacity, appointment distribution, visits lost to civilian providers, etc since “MHS (military health system) Optimization” efforts began in 2000, and although demand management is attempted through use of clinical practice guidelines and health promotion efforts, genuine demand forecasting is lesser explored territory. Capacity analysis is the beginning point for demand forecasting. The standards from the Tricare Management Activity are 1,500 enrollees per full-time provider and provider availability of 36 hours per week for 45 weeks per year. Unfortunately, no adjustment is made for actual support staff to maximize patient flow or physical plant restraints (number of exam rooms per provider, The Guide contains an algorithm for demand forecasting. This model would work well for a clinic such as internal medicine, pediatrics, or family practice, but would be of limited value to branch medical clinics, occupational health clinics, and clinics providing more general primary care services. This author’s experience performing medical inspections - including conducting customer and staff focus groups - is that access problems, demand management, and making appropriate staff mix adjustments are more complicated for three reasons. First, much of the care, whether acute or routine, is short-notice and variable. Demand varies based on the size and turnover of student populations, deployment schedules of active duty populations they directly serve, and unpredictable military requirements such as conducting pre-confinement physical exams, expediting separation physical exams, etc. In addition, many of these smaller, detached care sites also must allow time and provider availability for walking in minor injuries, which is both a demand issue and a capacity issue. Second, these clinics often have difficulty maintaining optimal clinic schedules to meet demand when providers or key support staff are unavailable due

to illness, leave, training, meetings and the parent facility, etc. The parent facilities, also under pressure to optimize, are often reluctant to provide adequate coverage. In fairness to parent facilities, geographic location and amount of time to send coverage are also factors. Finally, there are clinical and administrative support limitations. Limited ancillary (radiology, laboratory) support, lack of on-hand experts to consult with, variation in support staff levels (which cannot be compensated for without pulling personnel from the parent facility), and staff training limitations factor heavily into the demand/capacity equation. Many of those served by these clinics recognize the limits and variability in meeting demand that these clinics experience, and seem to adjust their demand accordingly. These patients tend to be selective in seeking care. Care may be delayed, whether by patient choice or by clinic circumstances and operating hours, until the patient demand “leaks” into the civilian community. Without proper tracking, any demand forecasting for these types of clinics will under represent true demand.

The utilization rate factor is a good starting point, but could be improved. A more accurate source of this factor would be the facility’s own historic data, which would be more reflective of the patient mix and their demand versus a demand figure that has been averaged out across a spectrum of facilities. Another issue in the utilization factor is the definition of a “visit”. Navy Medicine has improved its data quality and coding over time, but the number and weighting of a visit still varies among facilities. Especially significant is the amount of time a visit requires, an issue not addressed by the raw “utilization/year” figure.

The Guide omits an essential piece of demand forecasting—communication with customers. Clinics that communicate with the patient populations they serve are they ones best able to predict and meet future demand. This is especially true with clinics that support operational commands with deployment and training exercise commitments. In theory, by identifying future demand, the clinic is better able to find efficient ways of meeting demand while maintaining as much capacity as possible to meet all other patient demand.

The “EZ Access Primary Care Business Rules” chapter addresses the categorization of appointment types, freezing of appointment slots, cross-booking (scheduling a patient with a provider other than their primary care manager), and the need to have provider schedules open and available for scheduling 28 or more days in advance. More specific guidance is also provided on appointment template management for the clinic managers and appointment clerks.

## SELECTION OF TEST SITES

The IPT identified four facilities to be test sites for EZ access. Identification was based on 5 criteria: 1) one of each type of facility (medical center, family practice teaching hospital, community hospital, medical clinic), 2) two facilities currently doing open access, 2 not currently doing open access, 3) a mixture of in-house, contracted, centralized, decentralized appointment systems, 4) sites spread among the three Healthcare Support Offices, and 5) facilities changing over to the 'CHCS II computer system during the test phase were not considered. The four facilities chosen for participation were Naval Medical Center Portsmouth, VA (pediatrics department), Naval Hospital Bremerton, WA (family practice department), Naval Hospital Beaufort, SC (pediatrics department), and Naval Medical Clinic Annapolis, MD (primary care service). The two facilities currently doing open access were given EZ access test dates of January to May 2005; the sites not currently doing open access were given EZ access test dates of January to July 2005. The actual start date was contingent on the BUMED Operations Council giving final approval to the Implementation Guide.

It is interesting to note that the sites and specific clinics chosen serve stable active duty family member and retiree populations, and - with the exception of Naval Medical Clinic Annapolis - does not address active duty or occupational health populations. A more representative sample would have added a branch clinic of one of the three hospitals, or replaced one of the two pediatric clinics with a more active duty-intense clinic. The sample is very good as is, but would have been greatly improved by more aggressively taking on the issue of active duty access.

## CONCLUSION

Overall, several key aspects of the IPT have worked well. The team composition is very reasonable. It is a manageable size, represented a variety of levels of the Navy health care system, and had multi-disciplinary participation. The experience level of the IPT in terms of past exposure to open access is a healthy mix of those who have seen it succeed, those who have seen it be less than successful, and those who were essentially objective. The IPT wisely adopted applicable existing measures of success which had already won initial approval from the BUMED Operations Council. Omitting sites transitioning to CHCS II was perhaps their most intelligent decision, allowing the process to be tested without a major component - the IT system

through which appointments are structured, managed, scheduled, and reports generated – distorting the results. On the other hand, several issues were not addressed that will very likely result in the an eventual reworking of the rules, whether from the BUMED level or at the local level where “work-arounds” will be created. The issues the IPT did not consider include after hours urgent care availability, the ability of patients to enroll to civilian Tricare providers, the need (especially at branch clinics and facilities serving a large number of operational forces) to work in active duty and mobilizing reservist patients on extremely short notice, creating a surge that may make achieving the “3<sup>rd</sup> available appointment” standard problematic, the availability of care from nearby Army and Air Force facilities, the absence of customer input on access to care options, and the comprehensiveness of patient visits.

Fortunately, there has been no cost associated with the IPT except for the time invested by the participants and the time spent by facilities completing the survey. If BUMED requires or strongly encourages all of its facilities to implement open access, there will be a large amount of labor expended throughout Navy Medicine training clerical staff (including the constantly-rotating enlisted corpsman staff) in scheduling and keeping appointment templates current, having management-level personnel monitoring success and reporting metrics to leadership, and in re-educating patients on access to care.

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