

Written by Col Phil L. Samples with significant input from of my earliest AF mentors,
Col (ret) Fred Coleman and Col (ret) John Hammond
(current as of 2 November 2008)

Pharmacy evolution within the Air Force occurred at generally the same pace as the profession itself. Although the relative pace of change was the same military pharmacy arguably lagged a number of years behind. Early in the AF history, the vast majority of pharmacists served in other roles such as Medical Supply, Medical Administration and Laboratory officers. As late as 1957, only 25 of the 232 pharmacists in the AF actually worked as a pharmacist. The shift in roles from these other duties to roles specifically for pharmacists occurred when the Biomedical Science Corps reorganized with a Corps Chief and specialty specific Associate Corps Chiefs.

DoD pharmacy leadership realized early the importance of forging professional relationships between DoD and national professional pharmacy organizations, such as the American Pharmaceutical Association (APhA). In 1966, the AF Surgeon General, due to a congressional directive, tasked the first Associate Corps Chief for pharmacy, LtCol Hibberd to assign pharmacists to each of the 110 AF medical facilities. The assignment of pharmacists to each fixed facility in the continental US was in large part due to efforts and congressional influence of the APhA. By the end of LtCol Hibberd's tenure, there were 104 pharmacists assigned and one in training. Col Maxine Beatty, the second Associate Corps Chief, put the Malcolm Grow Medical Center at the forefront of DoD pharmacy focusing on providing state-of-the-art IV admixture and unit-dose. Capitalizing on the successes of Col Beatty, the next three Associate Corps Chiefs, Col Fred Coleman, Col Bob Strait, and Col John Hammond, there was a second expansion of pharmacists within the AF to a number comparable to current staffing levels. The move toward more significant inpatient services to include unit-dose and IV admixture and an in-depth manpower review driven by Col Hammond were key to this growth period. Today, as the AF draws down the number of MTFs to about 75, pharmacists continue expanding their roles to reflect the national trends of patient safety, pharmaceutical care, and positive clinical outcomes, as well as Air Force Leaders. Pharmacists remain an integral part of the Biomedical Science Corps as clinicians and officers.

The Pharmacy Profession has evolved throughout our history, along with the practice of medicine. As noted above, the move to expand services and provided state-of-the-art inpatient services drove a number of changes in the late 1970s and early 1980s. In August 1980, Gossman and Love highlighted these services in an article published in *Military Medicine*. Also, in the 1970s the Air Force sponsored our first post-BS trained Doctor of Pharmacy candidates. These AF pioneers laid the groundwork for the clinical services pharmacists provide: from the outpatient clinic to the ICU. These services are critical to improved patient outcomes while maintaining current staffing levels.

AF Pharmacy continued with significant transition and growth through the 1980s and 1990s with increasing roles in readiness and deployment, to adaptation of rapidly growing technology. Significant among these were the deployment of pharmacists and pharmacy technicians during the first Gulf War. These early deployments were vital for the inclusion of pharmacists and pharmacy technicians in the restructuring of the EMEDS +10 and EMEDS +25 in 2004. Additionally, early adaptors for workflow changes studied the benefits and challenges of satellite operations within the Tactical Air Command (now Air Combat Command) verses the larger pharmacies. As a result, what we see today is splitting of work into two or more sub-

pharmacies within the main pharmacy and a mixture of operations at our larger facilities where actual patient flow and parking limitations is factored into the planning process.

Technology also grew exponentially during this period from early days of typewriters to the UCA (MEPERS) computer in early-80s to the Tri-Service Micro Pharmacy System (TMPS) by NDC in 1987 (also known as TriPharm) to the first iteration of CHCS in 1994 and to automated refill adjudication. Internet drastically improved the rate at which information disseminated. Finally, automation reached the point today where we have significantly mitigated the risk of pharmacy medication errors through the implementation of bar-coding technology in our dispensing processes.

AF Pharmacy has many unique capabilities compared with civilian practice. Recognizing the influx of AF pharmacists and the changing pharmacy school curriculums that did not adequately address military pharmacy operations, the AF identified the need to establish some formal training process to aid these new officers early in their AF career. Combined with Laboratory and Nutritional Medicine officers' pharmacist began to attend the Biomedical Sciences Corps Officer Management Orientation (BOMO) course at Sheppard AFB in 1984. The purpose of this course for these three AFSCs was to help them through the challenges of their first duty assignment, where many were in one-deep officer billets leading operations with a large staffs and sizeable budgets (foreign to most civilian pharmacists). In 1986 then Associate Corps Chief, Col John Hammond saw a need to share the tremendous amount of expertise of our AF pharmacists throughout the career field and therefore created Subject Interest Groups (SIGs) in five areas; Readiness/Wartime, Clinical Pharmacy, Pharmacy Practice, Logistics, and Computers/Information. Col Phil Samples revitalized the SIGs in 2003 and added a Pharmacy Administration SIG.

Col Hammond also recognized the importance of developing leaders and networking those leaders and established an AF pharmacy "Board of Directors" comprised of each SIG Leader, the MAJCOM consultants (or points of contact since not all MAJCOMs have/had formal consultant programs), MEDCEN directors and Colonels. The group has since expanded to include the enlisted career field manager (CFM).

Following national trends and acknowledging ever increasing drug expenditures, the DoD Tri-Service Pharmaco-Economic Center (PEC) was established in the late 1990's. The PEC's role is to supply information and guidance to health care providers, promoting rational drug prescribing and use, and to develop and manage a common formulary, a process that continues to this day with the Basic Core Formulary (BCF).

As the millennium ended and congress set in motion and approved an enhanced Tricare benefit in April 2001 pharmacy expenditures skyrocketed. The extended benefit left unchecked any process for containment of the formulary and beneficiaries could, for a small co-pay, receive any medication they wished in the retail sector. Over the next several years, the DoD struggled to slowly bring this rapid expansion back under control. A number of concurrent initiatives aided in this effort. Key among these efforts was the increasing capability of our automation to include the Pharmacy Dispensing and Transaction System (PDTS).

Significant events during the early 2000's included a \$25M project lead by Col Meier for the implementation of standard bar-coding technology that could decrease waste and mitigate errors. Today the AF leads DoD in automation and risk reduction and was recognized in June 2004 by APhA with the Pinnacle Award. Another significant event during 2004 was the move during SecDef Rumsfelds era to civilianize vast portions of the DoD. Particularly hard hit originally was DoD pharmacy. AF Pharmacy was tasked to convert 72% of our military

technicians, a number that was later reduced to 31% after hard fought battles by Col Samples and CMS Lopez. Realizing the challenges of these conversions the 2008 National Defense Authorization Act (NDAA), will end all military-to-civilian conversions this FY (08) with those positions not filled (from any of the three FYs) converted back to military positions. Pharmacy is one of the few, if not the only, professions in DoD healthcare that has minimal control the work volume and is a substantial portion of every MTF's operational budget. Another significant event of this decade was the decision by the Joint Commission to not continue to grant the DoD a waiver for pharmacist involvement in the dispensing process which for the existence of our relationship allowed technicians to check technicians. Col Samples along with the Army and Navy consultants met with the executive leadership of the JCAHO in October 2003. Subsequent to that meeting he briefed the AF/SG (LtGen Taylor) and the AF/SG Executive leadership on the results of this meeting. This briefing set into motion the approval process, the POM process and eventual execution, during Col McAllister's tenure, of an additional 150 contract pharmacists.

AF leadership recognizes the noteworthy impact and essential role pharmacy plays in the delivery of healthcare. Every healthcare practitioner should study their history and seek opportunities to improve the delivery of healthcare to our patients.

To date pharmacy has had 12 Associate Corps Chiefs: 1) LtCol Paul Hibberd; 2) Col Maxine Beatty; 3) Col Fred Coleman; 4) Col Bob Strait; 5) Col John Hammond; 6) Col Jon Buth; 7) Col Jim Young; 8) Col Jim Normark; 9) Col Ardie Meier; 10) Col Phil Samples; 11) Col Everett McAllister; 12) Col Mark Butler.

Pharmacy Phun Phacts:

- AF pharmacy budget is \$668,700,000 (2007) – larger than the GDP of 18 of the world's countries
- AF Pharmacy Outpatient Prescription volume/yr = 15,839,515 or equivalent to approximately 325 -350 busy retail drug stores (accomplished by 75 MTF pharmacies)