**EPCM: Overall**

* Helped design, build, staff Scale-O-Meter demonstration for 2012 Ignite Conference.
* 158 DTRs implemented with 2012 chargeback reclamation in excess of $16M. 2004 -2012 cumulative DTR chargeback reclamation saving are in excess of $325M, capital forestall in excess of $140M. Continuing partnership with application and infrastructure teams to drive efficiency, stability and scalability.
* 36 Distributed DTRs improving IRIS, Emptoris, CAMS, IFMS, PEER, IRIS, eHP, Emptoris, PBH Facets, OptumDW, Hyperion and several others. All improved either stability and/or, run time, many showed a > 90% overall efficiency improvement.
* Wrote “Help for RxSol Apps: Diagnosis, Prescription, Treatment Plan” which provided the tactical remediation approach to stabilizing and improving the RxSol app portfolio. Cross functional effort has been successful in stabilizing portfolio (e.g. parsing RXSQL00 server), work continues.
* Authored executive overview of RxClaim application architecture, stability profile of each RxClaim Service, overall assessment. Authored E&I Stability Review
* Wrote E&I Stability Review, IRIS: State of the App (May 2012), contributed to ETPIS 2013 Priorities (Strengthen the Core). Also authored “Tier 0 Hardening- Monitoring” presentation, a spinoff of Strengthen the Core.
* Presented EPCM/SSS “State of the State” to SSS Senior Leadership meeting.
* Assisted E&I in developing and presenting responses for business RFPs (i.e. Texas ERM).
* Responded to many external audits by regulatory agencies, external customers, etc.
* EPCM\_All meetings held in April and October. Utilized telepresence across the country and globe.

EPCMers volunteered at:

* United Way "Day of Caring" at the Indian Valley YMCA Child Care Center, Vernon, CT.
* Feed My Starving Children
* Habitat for Humanity
* American Heart Walk and Fundraiser
* UHC “Do Good, Live Well Program”: Build Playground at Plumley Village, Worcester, MA
* UnitedHealthcare Day at Second Harvest Heartland
* MN Vikings Second Harvest Heartland Fund Raising
* UnitedHealthcare - Arizonans for Children
* Red Cross Blood Drives

**EPCM: Enterprise Capacity Management:**

* ECM supported applications increased from 51 to 63 CBA applications plus added 13 other key applications.
* Created new process to analyze capacity needs of VM silos that have CBA applications resident.
* Added iSeries capacity planning to monthly/quarterly reports
* Actively engaged and supported FreshStart conversion activities, infrastructure expansion and performance testing.
* In-depth engagement with TOPS and Claims Highway to accurately forecast future CPU and Storage for ODS/Service Channel database (previously known as ODS).
* Managed ICES Clearinghouse 2x growth with frame balancing moves and expansion of CPU and memory on 14 servers.
* Managed/forecasted IRIS capacity needs for RxExpress migrations and implementing Exalogic in the application tiers while escalating to senior management the need for more hardware for Jan 2013.
* Created standard process to track CBA application/server info for use in reporting and for common usage for all of EPCM.
* Improved the AIX virtual configuration reporting with CSV file to be used by EPCM and UNIX operations.
* Created AIX Frame Sub Pool Capacity identification and forecasting processes.
* Addressed applications with very large growth rates (e.g. eSync, ICES, iSET, Facet-CSP, Americhoice DataMart, eHP, IRIS, etc.) which required detail analysis and cross team interfacing.
* Created zLinux guest watch list and reporting via automated SAS jobs.
* Actively engaged in Capacity Management plank for NGIS/uCI.
* Forged efforts to improve stability and performance of VMware virtualization environment.
* Added new data into UHG capacity data-warehouse on mainframe for zLinux and VMWare systems.
* Initiated new monthly system capacity/performance report and review process with C&S applications, looking to expand to other CBAs in 2013.
* Created CBA Dashboard for monthly and quarterly reporting
* Expanded Quarterly Enterprise Forecast presentation to include Mainframe and Distributed Storage reports.
* Worked with Queue Management to proactively identify and remediate capacity needs in a controlled and planned process for peak season.
* Add new Distributed Capacity Toolset to ECM tool box improving our frame tracking/forecasting efficiency.
* Created automated weekly frame watch list identifying hot frames.
* Completed mainframe workload moves such as shadow regions and QREP to balance workloads across the mainframe CPUs.
* Moved 20 lpars to different frames to support application growth forecasts.
* Tuned/identified looping tasks for many distributed LPARs to avoid LPAR moves.
* Tracked successful rollout of 5010 work.

**EPCM: System Performance Management:**

* Developed trend database for AIX servers and automated production of weekly frame watchlist to assist capacity planning.

- Developed trend database and watchlist for z/Linux to assist capacity planning.

- Developed new process for TWS chargeback for implementation in 2013.

- Provided iSeries CPU usage and response time information, is now reported on daily on the EPCM website.

- Upgraded MXG to Version 30.05 for current features in metrics reporting.

- Developed storage RPO (recovery point objective) charts to show response time for GDPS (Geographically Dispersed Parallel Sysplex) DASD.

- Created new CICS Sums file that contains Transaction mapped to Application and summarization at the 5 minute level.  This allows for reporting at the Application level versus region level and also reporting which matches distributed reporting at 5 minute level.

* Two technical papers were written for International Computer Measurement Group conference.
* Created TOPS Terminal Slot reporting providing a trending view of Slot usage.

- Assisted in UMR (DELTA) migration to UNET PROD (C1UN).

- Improved mainframe availability by changing maintenance window to allow some systems to return to steady state early and not have to wait for Q1 IPLs that can’t start until 11pm CST.

- Support migration to Thruput Manager maintenance level TMT6216.

- Worked with multiple mainframe teams on JCL Standards and enforcement in Endevor.  MVS team implemented in September and enforcement begins in December.

- Cross coupling facility (XCF) tuning to MAXMSG parm and add 64K transport class for large messages.

- Developed alternate tool for TOPS terminal usage (TMON/VTAM) to replace NPM software- will save $270k/yr.

- Assisted in moving workload off UH1 box to balance to others, postponing upgrade.

- Helped develop process for MQ & DB2 data to be fed through Chargeback so detailed costs can be apportioned out to the application areas.

- Researched zIIP capacity planning and reporting to provide usage information for 2013 planning.

- Provided VSAM/RLS tuning and usage recommendations to storage management to increase local buffer and combine two sets of RLS coupling facility structures.

**EPCM: Performance Engineering:**

* Increased Overall Performance Testing Projects completed by approx. 15% over 2011(276 YTD for 2012)
* Increased Load Farm Capacity to support approx. 15% increase in testing throughput
  + 10 additional Load Generators installed in Elk River
  + 2 additional Test Controllers and additional licensing added to support 9 concurrent tests and up to 25,000 total web vusers
* Upgraded Performance Center 11 to patch level 6 on 50 servers
* Established Performance Engineering Technical Team and support structure for internal support as well as external support outside of EPCM
* Increased Performance Testing Coverage of CBA’s(Critical Business Applications) for increased stability and performance
  + 74% tested in 2011 to 81% tested in 2012 (YTD)
* Implemented the Performance Test Engineering (PTE) Technology Community of Practice (CoP) along with five private groups to support the PTE discipline, and created a Practice Area Expert (PAX) Virtual Booth for purposes of showcasing the PTE practice
* Migrated 14 Eagan load farm servers to Chaska Data Center
* Migrated 3 Performance Center 9.52 physical servers to virtual servers
* Completed beta testing of Performance Center 11.5 and completed initial project plan for deployment Developed Performance Testing Mobile Strategy, established the Mobile Team for performance testing mobile apps
* Completed performance testing of the following Mobile apps: PAF (Patient Assessment Form), Health4Me, OptumizeMe, Provisor, DocGPS
* Continued rollout of Performance Project Management (PPM) Service Offering and piloted with FreshStart, as well as assigned a PPM to each CBA
* Implemented PPM Planning Spreadsheet for the PE Team to track CBA’s, maturity model progress and team reports
* Performance Testing Customer dashboards designed and prototyped
* Lead Performance Testing effort(scripting, test execution & reporting) on the Enterprise Load Verification of Infrastructure Services (ELVIS)
* Involved in performance test planning process for ICD10
* Completed 32 Fresh Start test cycles to support Chaska Migration, RxSQL00 Migration, Baseline, Stage Build, and Scalability test goals
* Established IRIS Support Team and completed Performance Testing for 7 IRIS Releases & Exalogic Upgrade
* UDP updates reviewed and scheduled for Q1 to increase knowledge of Performance Testing within the development process
* Developed process to support performance testing MQ applications
* AppStore performance tested using the first Silverlight protocol which led to the successful release
* Identified performance issues with CareOne on key member searches. Testing and tuning led to 40% decrease in transaction response times.
* Identified performance issues with M & R Consumer Portal on high CPU consumption. After multiple testing and tuning efforts, CPU utilization was decreased by 80% by removing unnecessary Apache rules.

**EPCM: Availability Management, Application Performance Management:**

* Worked with Claims Highway to remove WTX from several of their large server type jobs and replace the WTX product with native Cobol XML Parse.  The changes reduced the CPU consumption by 21,383 CPU per Month or an Annualized savings of $3,848,940. .
* Successful PBH Facets SWAT team participation to stabilize the legacy application by EPCM DDTR tuning.
* Eliminated an average of 250 DB2 contentions per day on MSE CICS regions and improved CICS response time by a 96%.
* Designed, tested, help implement TOPS/e (Phase II of TOPS virtual storage management)
* After NDB installed a change to program N5938IN3 – transaction INF3, we quickly identified a large increase in usage and were able to suggest changes reducing the CPU by 99.98% for a monthly CPU savings of 7,868 CPU hours per month or an Annualized savings of $1,416,240.
* Worked extensively with Compuware on installing, customizing, writing test programs, and testing dynaTrace mainframe software.
* Developed automated process to find looping processes on distributed servers which were previously undetected by other means, recovering 33 CPU’s to date.
* Heavily involved in Axolotl assessment and remediation effort, including the permanent transfer of a top technician.
* Developed, coded and implemented the SLOT MONITOR process in the TOPS CICS regions.
* Determined root cause of CAMS MQ horizontal scaling issue
* Contributed to Consumption Reduction initiative by finding hundreds of low use/underutilized servers.
* MyUHC stability. It had been determined that MyUHC was failing on calls to CDB.  Determined CDB had added new functionality to call TOPS.  Also, determined that TOPS had a scheduled DB2 maintenance outage.  Changes were put in place to notify CDB going forward when TOPS will be unavailable.
* Peak Season Readiness project improvements, single source for updating risk status and reporting, eliminated duplicative efforts, enhanced PSR dashboard functionality.
* Worked with COSMOS to implement many changes which resulted in the elimination of over 200,000 contention issues annually.  This effort provided greater application stability, improved user response times, and reduced rework required.
* Worked closely with MVS Systems, DB2 Systems, CICS Systems, and the DBA team to resolve three major application outages over a two month period.  Impacted applications included B2B, B2C, ORS, NDB, CDB, ICUE, ISET, & MyUHC.  Each of the outages had different symptoms and required different methods of recovery.  Created unique solutions to recover the applications quickly.  IBM identified root cause as an issue with page latching in DB2 V10.  A fix was successfully installed.
* Asked by ECAP team for assistance with an urgent issue.  A monthly reporting process was running for a very long time.  There was great concern that the reports would not be created on time for the business.  Worked around the clock for several days with the DBA team and the ECAP team.  Redesigned the process making it far more efficient.  Reports were created on time with no business impact.
* Asked by CES team for assistance with an urgent issue.  A job that typically ran very quickly was running for a very long time.  In-depth analysis revealed an infinite loop.  Determined the code had been put in place nearly a decade earlier, but had never been executed.  The reason it was being executed on this day was that it was the first time Texas ERS data was flowing through CES.  A coding change was made to fix the looping issue.
* Monitored and analyzed CICS virtual storage, and in particular TOPS regions.  Researched and devised a solution to provide virtual storage relief to TOPS.  The gained storage to be used for processing additional transactions in the future.  Also worked with/requested TOPS to increase the limit the number of terminal slots in TOPS.
* Researched and composed a callable module to allow batch applications connect to DB2 and MQ simultaneously and make updates with data integrity through RRS.
* Worked on HIPAA logging project and developed program and process to collect and transfer information to IRM (Security) about the usage of HIPAA-sensitive data.
* Enhanced the MQ reports.  Developed and provided to MQ and application teams various ad hoc MQ reports for problem analysis, performance monitoring, and capacity tuning and planning.
* Wrote CICS system utility programs for problem determination and monitoring.
* Identified problem with coordinated effort to restore CICS Push/Pop tuning to all production CICS regions. Tuning had been regressed by a change.
* Worked with the John Deere Health Systems on some long running WTX jobs.  Were able to reduce the run time of the jobs by 80% and CPU by 76%.
* Developed time-saving query/reporting for C&S Facets applications.
* Created a process to catch looping processes. This allows us to stop looping processes that are consuming extra CPU.
* Added 5 minute interval Openview data to the Openview oracle DB. This will allow us to do more detailed performance reporting in 2013.
* Assisted in performance diagnostics/tuning for ADM migration to AIX
* Assisted in tuning PeopleSoft Archival processes.
* Designed and implemented Mantis deployment into managed services.
* Helped diagnose and eliminate OOM issues in PEER.
* Helped with diagnosis and resolution of performance issues in EPS.
* Hyperion performance improvement - Coordinated the gathering of requirements, engagement of Infrastructure teams and development of remediation of performance issues in time for Year-end close processing.
* Developed and coded changes to 7 online CDB programs to significantly reduce access to the DB2 catalog when executing DYNAMIC SQL which contains INLIST’s.
* Collaborated on APM efforts to reduce contention abends in the COSMOS application.

**EPCM: Operations Support Management**

* OSM supported applications increased from 58 to 75 Services
* Consistent year-over-year Availability improvements observed in 14 OSM supported applications
* YTD 99.85% Availability achieved for 72 OSM supported applications (thru Oct)
* Scheduled, prepared and delivered 43 ASR presentations, as part of EPCM support and leadership of Enterprise Stability Program
* Supported successful server migrations to the new Chaska Data Center
* Supported remediation of NAS mounts from the Backup Data Network to the Primary across the OSM application suite to resolve firewall capacity issues
* Enterprise Load Verification of Infrastructure Services (ELVIS) testing for Peak Season preparation
* RXSQL00 database cluster replacement completed, to improve stability and scalability. 26 databases were moved to Special Services, 12 to Managed Services, and 4 were decommissioned. PLM upgrades were also completed
* Completed an emergency workload move off of the ILEAD/RxConnection/STARS ALUI server silo to accommodate M&R peak season volumes
* IRIS completed migration to Exalogic hardware and an upgrade to M8000 database platform to address scalability for RxExpress migration and Freshstart
* Supported RxExpress migration to IRIS
* Led the annual Performance Enterprise Load Tests (PELT)
* TOPS shadow regions have been created for each payment region. This relocated BTMQ work to the shadow regions from the payment regions, and allows the regions to be flexible to LPAR moves
* TOPS has implemented new utilities (ex. PACMAN) that clears stagnant connections to avoid filling the connection tables
* COMET Desktop and TOPS successfully completed the Rapid Recovery DR test
* All TOPS and Claims Highway VSAM was converted to DB2
* COMET successfully migrated from Autosys to TWS
* eSB implemented database archive/purge process improvements, resulting in time reduction of 4 days down to 2
* eSB database query improvements were implemented, resulting in faster batch processing by several hours on average
* Helped with EeS being geo-dispersed between Plymouth and Elk River Data Centers
* EEMS hardening effort completed, including several PLM upgrades
* EEMS initially discovered, and drove remediation for, the AIX/G7 bug, which ultimately impacted other CBA’s and required an enterprise wide P7 remediation effort
* Continuous improvements implemented for EVP call handling (default routing)
* EVP completed the TDM to SIP migration, which is now true IP to IP
* Supported the MyUHC implementation of multi-language functionality, being the first UHG portal application to do so
* Supported the MyUHC integration to the RSA Adaptive Authentication Siteminder infrastructure, for improved stability in user authentication
* Setup CPU settings to help B2B manage licensing costs
* UPM completed a WAS 7 PLM upgrade
* Transitioned Americhoice Datamart from Swat Team to full OSM support
* Americhoice Datamart Oracle RAC database migration from Linux back to AIX completed, to improve stability and doubled the I/O capacity to the database
* CareOne SQL servers PLM upgrade from SQL2005 to SQL0008, for improved stability
* ICUE WAS 7 PLM upgrade completed, for improved stability
* ACIS completed database and WAS PLM upgrades
* Supported efforts to migrate RxClaims into Managed Services, thus improving stability
* Supported a Facets CS CSP database server hardware upgrade to allow member growth from 1 million to 2 million
* Supported numerous other PLM upgraded, DR exercises, and LPAR capacity moves across the applications suite
* Don Jess received the 2012 imPAX Award for his outstanding contributions to the OSM Community of Practice, for the second consecutive year

**EPCM: Enterprise Performance Services**

* Upgraded the entire Compuware dynaTrace environment to the latest version which includes UHG designed enhancements in weighted benchmark calculations.
* Deployed Compuware Portal and BSM architecture which includes many UHG designed functions including the benchmark corridor visualization.
* Migrated all Compuware infrastructure in ETC to CTC.
* Identified performance and stability fixes for UPM, ETS and ISET that involved uncovering bugs deep within core Microsoft browser code, .NET and AXIS packages.
* Extended Compuware Agentless instrumentation to both Axolotl datacenters
  + Increased the number of monitored services by nearly ten-fold.
  + Implanted new integration between Compuware and HP Openview to allow Alarmpoint notifications.
* Too Big To Fail:
  + Implemented Active Directory monitoring which was crucial in determining root cause of the largest AD outage ever experienced by UHG.
  + Four new Agentless Report servers, four new AMDs.
  + Extended Agentless monitoring to all Citrix servers
  + Assisted Compuware in the design of an Agentless decode for Exchange and Secure LDAP.
* Assisted in development and pilot of dynaTrace for Z/OS and WebSphere Message Broker – the first of its kind in the industry.
* Application performance SWAT efforts for BOSS, OptumX, ISET, ILEAD, CCI Navigator, eSync Health Portal, CPW Robot, CSP, ICUE, RxCLAIM, EEMS, MIIM, IDRS, Frontier, External Collaboration Sharepoint, GPS, CA Identity Manager, Kana IQ, RSA Adaptive Auth, OCP, DCE, OPT-IN, OMEGA, PEER, RXConnect, IRIS, RXHD, RX Solutions, RX Web Service, SAM, SubroTrack, FACETS CSP, FACETS URV, Planview, Diamond, Emptoris, EPS Payables, SEER, and others.
* Led initiative to shut down external data aggregators threatening MYUHC confidential data.

**Sundries**

* Wrote “The 4th Generation of Performance Reporting” paper which was accepted for presentation at the International Computer Measurement Group Conference (WS).