**2019 Accomplishments**

**Evolution of Core Services**

* Coupon/Voucher Design Optimization – consulted on the following projects:
  + Dulera/Asmanex $0 Coupon Design Forecast: from $15 to $0 FALA
  + Dulera/Asmanex: Abandonment/Adherence Study from IQVIA data
  + Steglatro Family 2019 Coupon/EV/DC Cost Forecast – coupon design analysis w/goal of optimizing design by adjusting max payout
  + Steglatro Family 2019 DC Budget Study: made cost projections for the Steg Family (Steglatro/Steglujan) Denial Conversion program and estimated when the program would exceed budget (determined cutoff date for the program in 2019)
  + Prevymis: State and National EV Startup Abandonment Cost/Benefit Study – pick optimal geographies for launch of an EV program. Ran multiple iterations of the State study.
  + Januvia Copay Design Study: evaluate FALA $5-$25/$125-$175 MAX copay designs
  + IQVIA Abandonment/Adherence Study for 90-day scripts for DPP4 Market – developed requirements for IQVIA 90-day study w/Senthil Murugan. Needed for optimal design of 2019 Januvia coupon design targeted at 90-day scripts.
  + Januvia 90-Day Copay Design Study: evaluate FALA $5-$25/$125-$175 MAX for 90-day coupons
  + Januvia Initial Copay Benefit Study: compared the initial copay of copay users to that of non-copay users (adjusting for payer) and concluded that copay users have higher initial out-of-pocket costs.
  + Januvia National EV Study: use RH data to evaluate re-launch of a national EV program for new patients for Januvia
  + Januvia State EV Study: use RH data to determine best states to launch an EV program for new patients for Januvia
  + Steglatro Rx/Sample Study: did Rx analysis of HCPs/Locations that received samples. Determined that there were a large # of HCPs/Locations that received samples that had no Steg sales! (However, there were some huge outliers in this analysis!)
  + Dulera 2019 Redeemed Voucher Promotion Efficiency Study: evaluated promotion efficiency of 2010 Dulera voucher program
  + Dulera EV Startup Study: cost/benefit analysis of proposed launch of an EV program for Dulera
  + Dulera New Patient EV Startup Study: cost/benefit analysis of proposed launch of a New Patient EV program for Dulera
  + Belsomra Copay Design (Cap) Study: cost/benefit analysis of alternative copay (cap) designs for Belsomra
  + Belsomra EV Copay Design Study: cost/benefit analysis of alternative EV copay designs for new, continuing, and new/continuing patients
  + IQVIA Abandonment/Adherence Study for 5 Markets – developed requirements for IQVIA study w/Senthil Murugan needed for optimal design of 2021 coupons. Provide abandonment/adherence metrics for brand teams (e.g., Belsomra).
  + Insomnia Abandonment/Adherence Study: sent 2018 IQVIA results (in June) and 2019 IQVIA results (in November) to brand team.
  + Isentress Copay Design Study
* Vaccine/Specialty Promotion Response Curves (PRC): developed customer segment PRCs (year ending May19) for:
  + Nexplanon (High/Low Market, Nation)
* Marketing Mix Models: Pneumovax 23 (P23) MCM/MMF/HCP/HCC ROI Analysis: evaluated the sales impact of P23 HCP/HCC promotional programs for year ending Feb19 using marketing mix models for:
  + Doximity: $0.80MM measurable
  + Medscape: $0.78MM measurable
  + Peer Direct: $0.57MM measurable
  + Field Email not measurable
  + SFMC $0.32MM not measurable
  + Other $0.15MM measurable
  + Alerts $0.80MM measurable
  + Banners $0.31MM? measurable
  + eMails $1.25MM? measurable
  + eDetails $0.27MM? not measurable
  + Overall MCM: $2.63MM measurable
  + Overall MMF: $0.38MM measurable
  + HCC Display $1.52MM measurable
  + HCC eMail $0.48MM not measurable
  + HCC Print $0.57MM measurable
  + HCC Paid Search $1.17MM not measurable
  + HCC Social $0.89MM measurable
  + HCC Video $1.23MM measurable
  + HCC Organic Search measurable
  + HCP Organic Search not measurable
  + HCP Mass media $0.13MM not measured – paid search, display, print
* Adherence: provided measurement methodology consultation for 3rd party POC, in-store, and at-home 2018-2019 adherence programs. (Helped Finance perform ROIs.)
  + Connective Rx IQVIA Januvia ScriptGuide (SG) Abandonment Audit (POC): reviewed IQVIA SG audit and produced report summarizing results from the audit. The Audit was requested by the brand team.
  + Connective Rx IQVIA Januvia ScriptGuide (SG) Persistency Audit (POC): reviewed IQVIA SG persistency audit and concluded that SG program had high aband and low persist impact and proposed targeting future programs at New Patients.
  + Connective Rx (ScriptGuide (POC), PhysicianCare (POC), CarePoints (in-store)): Asmanex, Belsomra, Dulera, Januvia, Isentress, Steglatro; total investment: $MMs
  + Veradigm\Practice Fusion (POC: Acquisition): Gardasil ($0.5MM), Asmanex ($0.075MM) – consulted on measurement plans
  + Optimize Rx (POC: financial messaging): Asmanex/Dulera, Belsomra - consulted on measurement plans for proposed programs; helped formulate SOW for analytic work done by OptRx
* Consultation: provided data, consulted on measurement plan, and handed off analytic authority to Tracie for various 2018-2019 POC (in-office), in-store, at-home, MMF, and non-personal 3rd party managed promotional programs and census data. These included:
  + Patient Point (POC): P23, Gardasil, Emend
  + Coverwrap Communications (POC): Nexplanon, Belsomra
  + IPP (MMF): Keytruda
  + WebMD Exam Room Poster (POC): Nexplanon, P23
  + Medicx (email): Gardasil
  + Targeted Media Health (POC): Keytruda
  + RxEdge (in-store): P23
  + InMarket (in-store): Gardasil
  + Census Data (Tetrad)

**Operational Transformations**

* Marketing Mix Models: expanded the scope of marketing mix models to MCM channels and HCC engagements.
* Copay Design Studies: constructed a new baseline based on claims utilization when there is no copay program in place to measure impact of proposed copay designs.
* Copay Design Tool: worked w/vendor (DataZymes) to create an Excel/R tool to automate copay design studies

**Personal Development**

* Employee Development: Continue to work on developing procedures to expand the scope of marketing mix models and on improving the measurement of coupon utilization programs. Worked with patient-level data to measure the impact of copay programs.
* Consulting: approached customers to determine measurement opportunities for coupon utilization programs; instructed customers on new ways of measuring impact of copay programs. Worked w/sales operations and Finance to produce copay design studies. Worked w/Solved to get costs and timelines for MCM programs.
* Training:
  + SEM: completed online course *Longitudinal Data Analysis Using SEM (Allison)*
* Data Science Symposium: attended Data Science Symposium and presented “short talk” on The Saga of Marketing Mix Models

**Analytics COE Staff Development**

* Recruiting:
  + 2019 Graduate Intern: recruited, hired, trained and supervised graduate intern in summer of 2019. The intern worked on an EVoucher Discontinuation Adherence Impact study for Januvia.
  + 2020 Graduate Intern: recruiting graduate interns for summer of 2020.
  + MA&IO Graduate Intern Program: supervised MA&IO graduate intern program. Worked with Mike DeFazio to implement and manage MA&IO intern recruitment.