2018 Performance Plan for Blythe E Bealer

Employee Information

First Name	Blythe	Location	UPPER GWYNEDD PA USA-OFF
Last Name	Bealer	Country	USA
Job Title	Assoc. Dir, Quant. Sciences-(56153131)	Manager	Senthil Murugan
Personnel Sub Area	GHH-Z005	Job Code	56153131

Year End Review

Overall Performance Category

Successful

Year-End Review Comments

Managers Comments

Summary

Blythe has been instrumental in evaluating the business case for NBE. She played a multi-faceted role going well beyond her normal work responsibilities to successfully establish the business case for NBE for Januvia and Keytruda with an estimated upside of about $175 MM per year. Blythe is a primary consultant for Keytruda CIA work for MCM and MMF promotions and provides data, insights, and methodologies along with verifying the results. She packages the results effectively and guided the allocation of $42MM on various HCP channels for Keytruda.

Blythe is also instrumental in guiding the development of MMM for Keytruda. She helps to validate results and guides ZS on the modeling side. Blythe also validated the usability of new pathway model extensions to MMM and guided its evolution through multiple iterations of validations and consultations.

Blythe effectively executed various ad-hoc impact and ROI analysis for various brands and MCM/MMF channels. The informed investment is about $20MM. Blythe also tested, maintained, enhanced and on-boarded various digital data sources, Grail datasets and CIRRUS migrations in partnership with IT and architects. She managed offshore resources and developed them to tackle some of the common ROI analysis carried out by Promotion Optimization team.

Blythe executed many of the above mentioned projects well above expectations by going above and beyond of what is normally expected. She is the data guru of the team and several IADS team members are highly dependent on her expertise. Blythe is a well-established exceptional collaborator and the IADS team members, clients, architects, IT personal – or for that matter

anyone who interacts with her – are highly appreciative of all the help, support and expertise she offers. Blythe's contributions to the team and the business are invaluable.

Stakeholder Feedback

Blythe is seen by her stakeholders as approachable, highly collaborative, easy to communicate with, responsible and accountable. She is very engaged while being directive when she needed to provide guidance to help the team resolve an issue or move forward with the study. She is seen as a great partner and did a wonderful job presenting study results to senior and marketing leaders. One of the stakeholders would also like to see a continuous improvement in the team's ability to translate the complex results into outputs that are easily digestible for business.

Performance Priorities

Complete
Innovation - NBE

Business

Support JANUVIA and KEYTRUDA brand teams in determining optimal content and channel sequencing for next best engagement providing sales impact business case and incorporating learnings into journeys.

Managers Comments

Next Best Engagement (NBE) is an important high visibility initiative for Merck in 2019 involving coordination between several Merck teams. The seed for NBE was planted in late 2017 and throughout the year 2018 as a business case development. Blythe is one of the few team members who were involved actively from the beginning. Her tireless efforts in collecting necessary data, understanding them, educating other project members and ideas on grouping tactics and sub-channels are commendable and were helpful in proving the NBE business case. Blythe willingly engaged in content coding of assets - not an easy task or part of her defined role. This content coding strategy has defined the basics of future content coding of assets. Blythe was also instrumental in supporting the implementation of optimal sequence couplets and triplets by the Digital Engagement team. The identified upside from NBE work for Januvia and Keytruda is about $175MM per year. Blythe played an outsized role in success of these business cases and setup a strong background for NBE expansion in 2019 and beyond.

Priority Details

Due Date	12/31/2018	Priority Updates	1.	Blythe E Bealer 12/12/2018 • Provided personal and non-personal promotion data to ZS to create analytical datasets for project. • Provided data insights to determine how to accurately interpret, summarize and

group tactics and sub-channels.
• Supported JANUVIA content coding process for representatives' CLM data, digital non-personal promotion and MMF programs identifying what data is available and can be used to categorize content.
• Worked with other IA&DS team members to determine digital plan provided to ZS for business case estimation to optimize number of deliveries and incorporate segment learnings from the plan into JANUVIA journey.
• Reviewed business case estimated increase in sales as $30MM for JANUVIA and $143MM for KEYTRUDA if NBE was utilized.

Complete

Core - KEYTRUDA CIA

<div style="border:1px solid;">Business</div>

Support GCS Oncology Multi-Channel Integration team and brand teams in allocating media, medical education and MMF spend across indications, HCP promotion channels and vendors using Channel Investment Allocator and results from marketing mix models.

Managers Comments

Keytruda MCM team spends over $45MM per year on various MCM programs. Blythe worked closely with Keytruda MCM architects, ZS and other brand points for Keytruda to compute and/or verify the impact of these promotions, communicated these tricky results and recommended appropriate investment levels. Given that Keytruda has lot of data challenges, innovative ideas are needed for such tasks. Blythe consulted heavily on the development and implementation of Channel Investment Allocator (CIA) model by ZS. She spent lot of her time including late nights and holidays with architects to guide and translate the inputs and results appropriately.

Blythe was also actively involved in the development, support and interpretation of complex MMM work executed by ZS. She paid deep attention to the interpretation and evolution of new attribution techniques such as pathway models. Debbie Cava, her client, has personally told me great things about Blythe's patience, consultative approach, collaboration skills, detail orientation and the expertise she provides for proper investment of promotional dollars.

Priority Details

| Due Date | 12/31/2018 | Priority Updates | 1. | Blythe E Bealer 12/12/2018 |

• Supported KEYTRUDA GCS Oncology Multi-Channel Integration team and brand teams in allocation of $42MM HCP media, medical education and MMF budget for 2019.
• Supplied activity data for several HCP channels and promotional cost for all HCP channels for marketing mix model analysis.
• Reviewed MMM assumptions and results with ZS and Yan to validate carryover and independent variable estimates compared to previous run.
• Compared % sales contribution and ROI between original methodology to new pathway methodology prior to sharing ROI results with Multi-channel Integration team.
• Improved usage of MMM results in CIA tool to allocate channel spend by capping spend in most profitable channel and then moving to allocate to next channel.
• Assisted in allocating budget by tumor type family and determining if additional funds were needed for some tumor type families based on upcoming market events or launches.

Complete
Core - Impact & ROI

| Business |

Continue to proactively identify and measure sales impact & ROI opportunities regarding HCP promotion to provide US Pharmaceuticals' Marketing and Sales Leadership with profit-maximizing recommendations to inform 2019 Annual Budget (ex. targeted non-personal promotion, mass media non-personal promotion, field representative email, Merck Medical Forums, US3C, etc.).

Managers Comments

Blythe did numerous ad-hoc impact and ROI analysis for various MCM and MMF channels and brands (ex: Januvia, Belsomra, P23, Gardasil). The total investment is about $20MM. She also provided relevant data and consultations to the vendors doing an impact analysis. Blythe reviewed the results thoroughly and presented them to brand teams and guided the architects to design the MCM journey.

Priority Details

Due Date	12/31/2018	Priority Updates	1. Blythe E Bealer 12/12/2018 • Supported multiple brand teams in estimating impact, cost and/or ROI for MCM, MMF and field email channels with about $20MM spend including: JANUVIA, BELSORMA, PNEUMOVAX 23 and GARDASIL. • Performed some analyses to determine ROI or provided data, cost and review to others' performing analyses. Packaged and presented results to brand teams or assisted in presentation to brand teams. • Provided guidance to Customer Engagement Architects and brand teams on MCM journey design, in-market tactic testing, control selection and general vendor performance.

Complete

Core - ACE 3PV Support

Business

Work with MDSI and Customer Engagement Architects to on-board new vendors that are providing HCP-level digital promotion data and to ensure data is consistent across vendors and can be used for ROI measurement.

Managers Comments

Blythe has a deep understanding of all the third party vendors' digital engagement data that are stored in Merck's environment. She regularly evaluates and on boards new vendors and tests the validity of such data. She works closely with IT, multiple vendors and internal stakeholders (including IADS team) and educates them on the numerous nuances associated with digital data. Several of our IADS team members rely heavily on her expertise and highly collaborative guidance to successfully execute their projects.

Priority Details

Due Date	12/31/2018	Priority Updates	1.	Blythe E Bealer 12/12/2018 • On-boarded three vendors (Everyday Health / Medpage Today, Skipta and Watzan) meeting to review assets they offer and the

HCP level data they are able to provide. Determined how to map to our standard values while being consistent with other vendor mappings.
• Performed UAT on data for some vendors that have been on-boarded but not yet moved to steady state.
• Participated in project to determine which edetail mappings can be changed to video so that video becomes a new sub-channel in non-personal data.
• Participated in "Run the Business" meetings to understand improvements, changes and data issues in non-personal data and communicate them to larger IA&DS team.

Complete
Core - Promotion Resource

Business

Act as IA&DS point for promotion and Grail views in DDW and adherence curve update for NPV calculation. Participate in DDW Governance council representing IA&DS for DDW requests this year and for 2019 profit plan.

Managers Comments

Blythe is the primary data expert of our team and maintains, enhances and checks migration of various data sources (ex: Grail, Promotions, Publicis, Adheris adherence curves etc.). She has primary responsibility for Grail datasets, regularly requests for necessary changes to various data sources based on business needs and the whole group depends on these well maintained data to execute their work.

Priority Details

| Due Date | 12/31/2018 | Priority Updates | 1. | Blythe E Bealer 12/12/2018 • Checked Grail views monthly for accuracy and requested necessary changes in product, markets, detail groups and samples. Adjusted Grail datasets to add Publicis data, separate BELSOMRA vouchers and correct JANUVIA market. • Participated in cross- |

functional team for CIRRUS migration of DDW promotion and Grail views determining views to migrate and if changes need to be made.
• Participated in DDW Governance council representing IA&DS DDW requests for current year and 2019 profit plan.
• Collaborated with Adheris on updating commercial patient adherence curves and transitioned updates of Patient View adherence curves and NPV to Ambika.

Complete
People

Development

Supervise off-shore contractors on analytical projects to lessen workload of team.

Managers Comments

Blythe managed two offshore resources on project by project basis. She is highly organized, collaborative and an excellent educator and is very successful in guiding and managing the offshore resources. In 2019, she will manage few offshore resources directly and on-board them to Merck's environment.

Priority Details

			1. Blythe E Bealer 12/12/2018 • Supervised Mohit for further exploration of JANUVIA MCM HCP-level marketing mix model to understand ZS process and validate ROI that were found to be counter-intuitive or inconsistent with prior results. Met 1-2 times week to review work, provide Promotion Optimization analytic data sets and protocols, and determine next steps of the project. • Supervised Ramana in analysis of MMF impact and ROI for BELSOMRA and JANUVIA. Met frequently to share processes and review results and packaging of results for presentation.
Due Date	12/31/2018	Priority Updates	

Compliance

Conduct activities in accordance with policies and regulations, engaging compliance and legal for input and guidance in analyses, where appropriate.

Priority Details

Due Date	12/31/2018	Priority Updates	1. Blythe E Bealer 12/12/2018 • Established and renewed TPAs for all analyses involving ZS and other 3rd party vendors. • Shared ROI, NPV, net sales and other sensitive, financial assumptions in the appropriate manner on "need to know" basis both internally and externally. • Completed all assigned ethics and compliance training courses on time.

Signature

Manager:	Senthil Murugan	03/08/2019
Employee:	Blythe E Bealer	03/08/2019