SPRING 2015

MIMS matters

Big Data takes on Medication Errors

It seems that anytime you pick up a newspaper or surf the web these days you find plenty of references to Big Data. The media is full of stories describing how the use and adoption of Big Data allows efficiencies in cost, productivity and innovation. You may have even noticed that in recent years, there have been frequent health-related Big Data conferences and meetings around the world.

But what exactly is Big Data and how does it relate to health?

Big Data is a broad term for data sets so large or complex that the traditional applications of data processing are insufficient. Often the term refers simply to the use of predictive analytics to extract a previously untapped value from data, rather than Big Data being a description of the size of a particular data set. The current interest revolves around the belief that Big Data may lead to more confident decision making, and better decisions can mean greater operational efficiency, cost reduction and reduced risk.

In healthcare, the application of Big Data can be used to prevent diseases and improve the efficiencies of delivering care, while at the same time improving patient outcomes. An interesting example is the application of Big Data processing to the prevention of common and harmful errors in hospital medication ordering.

Let's step away from health for a moment to think about how errors are prevented in other industries.

At one time, flying was very unpredictable and risky. But today it is something totally routine and for many of us, so uneventful that it is considered boring. The reduction in the risk of flying was achieved by the detailed analysis of not only accidents, but also of what could go wrong.

In the early days of flying, accidents frequently occurred, and these accidents were analysed to find out "WHAT happened". As aviation matured into an industry, flying needed to be considered safe and reliable by the public. A new focus on reducing risk led to the industry thinking about "what COULD go wrong". The culture of aviation safety information analysis and the sharing of this data freely with others was established. This approach to proactively reduce the risks that could lead to accidents allowed flying to eventually become the safest form of mass transport in the world today.

Researchers are applying these very same principles to developing safer medication ordering using Big Data to prevent the most common and most harmful errors.

Dr Jon Bickel, a clinician at Boston Children's Hospital and Eric Hughes of the not-for-profit research organisation, MITRE Corporation, have taken many of the fundamentals that reduced risk in aviation and are now reapplying these same principles to reduce medication errors.

Bickel and Hughes explained that the characteristics of the successful programs that continue to reduce risk in aviation are:

- Fuse diverse data
- Engage all stakeholders
- Use advance analytics
- Aviation experts and data scientists work side by side
- Focus on pattern recognition, not individual accidents

Bickel and Hughes believe applying aviation risk reduction strategies and analysing data from multiple disparate sources across a hospital will identify previously unknown safety risks to patients.

This Issue...

1 Big Data takes on Medication Errors
2 Big Data takes on Medication Errors (continued)
3 Macquarie University Hospital Update
3 Update - The American Dream of 21st Century Cures
4 Unambiguous Information is Vital to Support Accurate Information Exchange Across the Health Sector
5 The Importance of Evidence-based Information
6 Clinic to Cloud
6 Z Software
7 PSA, MIMS Inaugural Intern of the Year
7 Cochrane Review Proves Interesting
8 MIMS Staff Profile
8 Upcoming Conferences

Big Data takes on Medication Errors
(continued)

Can we take data from multiple sources across the hospital and identify previously unknown safety risks? YES!

Jon Bickel, MD, MS,
Boston Children's Hospital
Eric Hughes, PhD,
The MITRE Corporation

The Boston Children's Hospital passionately wanted to take patient safety to a never previously achieved level. Inspired by the vision of the use of Big Data, the hospital decided to focus their effort on important problems that they knew existed in their hospital, but were hard to solve. They believed that key to their success would be the pattern recognition of detailed data from what had in the past, been considered unrelated log data. They also believed that new insights into medication management would be gained through partnering with others and their data, and the application of Big Data analytics.

Their hunch was that the more data they had access to, the greater the likelihood of finding patterns and therefore success. So they set about partnering with other hospitals and including their data in the analysis project to achieve a common good. Their program expanded to include data from three hospitals; the Boston Children's Hospital, the Children's National Medical Centre and the Cincinnati Children's Hospital Medical Centre.

Following the belief that Big Data analysis was desirable, the researchers sought out very large volumes, a wide variety and high velocity data across the three hospitals including:

- Medication orders
- Clinical decision support rules
- Medication administration records
- Clinician data
- Patient data
- Departmental operational data
- Safety event reports
- Hospital utilization data

The advanced analysis using Big Data principles then began. First the data was "fused" by linking individual data sets that may not have common identifiers. Then the data was "pattern mined" to find sequences or sets of objects of interest in the fused data set.

The research team questioned - what exactly are the early indicators of potential harm? Can we identify precursors to medication safety events? How can routinely captured log level data help us better understand patterns that may indicate vulnerabilities?

Pattern detection areas of focus soon developed. They decided to analyse medication orders that had been placed for one patient and then changed to another patient. Also in focus were medication orders placed at one dose and then rapidly changed to another. Why did these events occur, was there a pattern to be found?

Patterns were found. The focus was then centred on new medication orders that were placed, cancelled, deleted or discontinued resulting in a new order being placed. Of particular interest were examples of this pattern that had all stages, from ordering to change and eventual corrected re-ordering occurring within 60 minutes. Were these patterns pointing to potential medication errors that had they not been caught (and corrected) could have led to patient harm?

An analysis of these events found that they were early warnings of potential medication errors. In the area of dosing changes, the data displayed 100x more cases of interest than what were reported as safety events. This supported the view that analysing data for pattern detection and insights was valuable and would likely lead to reducing medication errors.

Their work continues and a process of pattern detection and insights will lead to safer medication ordering. In the study two standout factors became apparent: medication errors relating to the incorrect identification of a patient (such as prescribing a drug to the wrong patient) are more prevalent in high-turnover units; and, medication errors related to dosing issues depend on medication class.

The work of Bickel and Hughes indicates that by moving beyond just chart reviews and safety reporting, and including the analysis of hospital data, can provide early indicators of risk. The work also promotes the value of Big Data analytics combined with the partnership of clinical expertise in the analysis process can lead to safer medication ordering.

Unrelated to the work of Bickel and Hughes, but similar in that Big Data principles apply, MIMS is working with a number of organisations that are using MIMS medication data sets to feed extremely complex computer models.

The goal is that one day these systems will routinely monitor organisational prescribing activity in real time. The systems are not designed as a big-brother to police clinicians, rather the data is de-identified from a particular clinician or patient and the systems hope to provide systemic insights that can drive process improvement, safer dosing and contribute to medication safety.

Macquarie University Hospital Update

Macquarie University Hospital, Sydney

Sydney's Macquarie University Hospital (MUH) is at the leading edge of hospital digitization in Australia and has been rated in the top 3% of Australian hospitals for electronic medical records. At the heart of this success is the hospital's approach to managing clinical information and providing digital clinical resources and applications in their clinical workflow.

Right from the first day the hospital opened, MIMS has been the partner for drug and medicines knowledge, information and clinical decision support.

Macquarie University Hospital invests a considerable amount of time and effort in analysing staff and doctor feedback and documentation, to assess the suitability of the current clinical information systems to meet their needs. In addition to reviewing the hospital's current vendors' product direction and plans, the hospital demands that clinical information is interoperable and can be shared completely across their clinical and organisational environment.

With the drive for continuous clinical and organisational digital information flexibility, MUH is now rolling out their next generation clinical information system from MIMS' partner InterSystems.

The InterSystems solution will provide a single electronic medical record and patient administration system across the hospital, the clinics, and some of the University clinics. MIMS is currently working with InterSystems and MUH to integrate MIMS' independent, evidence-based drug information into all the clinical application modules. This integration provides real-time interactivity and intervention checks for doctors, nurses and pharmacists, allowing improved prescribing, administration and full electronic medication management at all points of care in the hospital.

Update - The American Dream of 21st Century Cures

The previous issue of MIMS Matters (Winter 2015), discussed the 21st Cures Act which was being considered by the United States Congress. The tabling of the bill followed a comprehensive review of the cycle of cures – from discovery to development to delivery and back to discovery. A Congress Committee participated in a wide-ranging conversation with patients, providers, innovators, regulators and researchers from across the United States. The committee concluded that Congress must take bold action to accelerate the discovery, development and delivery of new drugs and cures if the United States is to maintain their stated position as the world leader in biomedical innovation. The committee argues that it's both a health and economic imperative that America needs a strategy for 21st Century Cures.

In July, the legislation was introduced by Representative Fred Upton (R-MI), and sought to jumpstart American medical innovation by giving the National Institutes of Health an additional US$8.75 billion over the next five years; money that was badly needed by an agency that has seen its funding drop by nearly a quarter over the past decade. The bill also provides an extra US$550 million for the FDA.

It's a sign of the bill's strength that House Democrats and Republicans crossed the aisle to pass it overwhelmingly, by a vote of 344-77. Participants in health innovation including pharmaceutical and medical device researchers and developers, have welcomed the passing of the bill as an important and significant first step toward strengthening the American innovation ecosystem.

While supporters of the Cures Act say the legislation will accelerate the development and delivery of new medical treatments, patient privacy advocates have raised concerns that research to support new innovations will use data from patients' electronic health records without their consent.

For us in Australia, any American strategy to realise 21st Century Cures will have a major impact on our health system and the health and wellbeing of our population. If the act does lead to new pharmaceutical discoveries, then it would be expected that benefits would also eventually flow to us here in Australia.

Unambiguous Description of Clinical Information is Vital to Support Accurate Information Exchange Across the Health Sector

The way clinical information is captured and shared by healthcare providers is vital to the success of Australia's future e-health system. A standardised clinical terminology allows for the description of clinical conditions, procedures and medications which are then unambiguously and meaningfully communicated to support ongoing, efficient and accurate information exchange across the health sector. Standardised clinical terminology is fundamental to the quality of data for e-health, and it underpins the enabling of clinicians to exchange their traditional paper-based records for a modern, electronic system.

MIMS medicines information powers the majority of clinical medication solutions (such as electronic prescribing and administration solutions), used in both the acute and primary care sectors in Australia. This places MIMS at the forefront of facilitating the use of clinical terminologies that result in improved patient outcomes and overall population health, through the improved communication and availability of electronic medical records. MIMS frequently discusses the role of clinical terminologies with clinicians and technologists. At times, we find that there may be confusion around the role of SNOMED CT and the AMT. The following brief descriptions of each will help explain their relationship to each other and highlight their vital role within e-health solutions.

Australia's National Clinical Terminology and Information Service (NCTIS) is responsible for managing, developing and distributing terminology to support the e-health requirements of the Australian healthcare community. Two key clinical terminology solutions include SNOMED CT and Australian Medicines Terminology; both underpining the description of clinical concepts in solutions that MIMS and its business partners deliver to the health sector.

SNOMED Clinical Terms (SNOMED CT)

SNOMED Clinical Terms (usually abbreviated to SNOMED CT) is a systematically organised, computer processable collection of medical terms, providing codes, terms, synonyms and definitions used in clinical documentation and reporting. SNOMED CT is considered to be the most comprehensive, multilingual clinical healthcare terminology in the world, covering clinical findings, symptoms, diagnoses, procedures, body structures, organisms and other aetiologies, substances, pharmaceuticals, devices and specimen.

SNOMED CT was created in 1999 by the merger, expansion and restructuring of two large-scale terminologies: SNOMED Reference Terminology (SNOMED RT), developed by the College of American Pathologists (CAP); and the Clinical Terms Version 3 (CTV3) developed by the National Health Service of the United Kingdom (NHS). SNOMED CT terminologies can cross-map to other international standards and classifications; specific national terms are also accommodated. For example, SNOMED CT-AU, released in December 2009 in Australia, is based on the international version of SNOMED CT, but encompasses words and ideas that are clinically and technically unique to Australia.

SNOMED CT is used in a number of different ways in electronic clinical solutions. Some typical benefits of the usage of SNOMED CT within electronic medical records and e-health solutions include:

- The classification of patient data allows unambiguously and meaningfully communicated patient records, which reduces the need to repeat health history at each new encounter with a healthcare professional.
- Information can be recorded by different clinicians in different locations to an internationally standardised format, and combined into simple information views within the patient record.
- The use of a common terminology decreases the potential for differing interpretation of information by different clinicians.
- Electronic recording in a common way reduces errors and can help to ensure completeness in recording all relevant data.
- The use of a common clinical terminology allows a healthcare provider to identify patients based on specified coded information, and more effectively manage screening, treatment and follow up.

Australian Medicines Terminology (AMT)

The Australian Medicines Terminology (AMT) delivers unique codes to unambiguously identify originator and generic brands of medicines commonly used in Australia. It also provides standard naming conventions and terminology to accurately describe medications. The AMT delivered within MIMS integrated data and information is now a foundation component of electronic medication management systems that prescribe, record, review, dispense, administer and transfer drug information.

Some typical benefits of the usage of AMT within electronic medical records and e-health solutions include:

- Reduces errors by improving the precise recording, transcribing of medicines through the use of clear, standard and unambiguous naming.
- Enables the safe and reliable exchange of medicines information, ensuring continuity of care for patients across primary, secondary, private and public health settings, as well as across different healthcare providers.
- The use of SNOMED CT's common terminology decreases the potential for differing interpretation of information by different clinicians.
- Facilitates effective decision support for active ingredients to assist with drug allergy and drug interaction checking.
- Supports good clinical practice by allowing linkage of data such as clinical guidelines and dosing information.

The Importance of Evidence-based Information

Evidence-based medicine is frequently promoted as a relatively young discipline, but its philosophical origins extend back to the practice of medicine in Paris during the mid-19th century. Evidence-based medicine has evolved from the critical need to bridge the gap between research and practice.

Fundamentally, evidence-based medicine is the judicious use of current best evidence in making decisions about the care of individual patients. The delivery of evidence-based medicine results from the integration of clinical experience, clinical practice and the best available external clinical evidence produced by systematic research.

In today's information era, the sole reliance on physicians experience or "gut feeling" is suboptimal. However, it would be an imposing task for a clinician to independently cope with the influx of a huge variety of evidence-based information that could be considered in the care of an individual patient. The information available to the clinician may vary from irrelevant to very important; therefore evidence-based clinical decision support has emerged as a solution to integrate the best research evidence together with clinical expertise, patient values and experienced patient outcomes.

Therefore, the clinical decision support that enables clinicians to provide evidence-based medicine should be based on evidence, be independent and be free of biases, commerical or clinical.

MIMS is well known as a reliable source of drug information based on pharmaceutical product information. Often overlooked however, is that MIMS is also Australia's leading independent source of evidence-based drug and medicines clinical decision information.

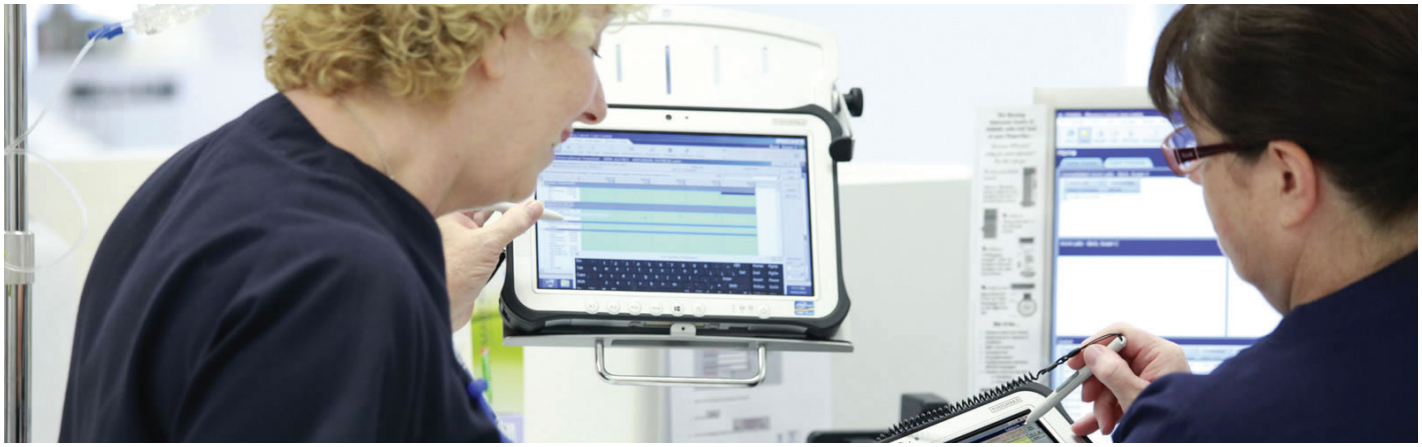
MIMS' independent, evidence-based information is not only provided within the clinical decision support components of resources such as MIMS Online and eMIMS, but is also the information that supports clinicians in the prescribing, dispensing, administration and reconciliation of medications throughout the public and private acute care sectors as well across primary care, aged care and allied health.

It is estimated that over 90% of all medications prescribed or administered in Australian hospitals are supported by MIMS knowledge, and the majority of acute care clinical applications used to provide electronic medicines management in Australian hospitals are powered by MIMS' independent, evidence-based information.

MIMS takes this responsibility to deliver the highest quality independent medicines knowledge and clinical decision support very seriously. Our clinical editorial charter places the highest value on independence and quality of information.

Data and information presented as clinical decision support are obtained only from recognised published medical literature or internationally accepted drug references, and not from the manufacturer's prescribing information.

In acute care, each state and territory public health system and the leading private hospital groups rely on MIMS' independent, evidence-based information to provide real-time interactivity and intervention checks for doctors, nurses, pharmacists and other healthcare workers to improve medication management at the point of care. Likewise in primary care, community pharmacy, aged care and allied health, MIMS provides and encourages the use of independent, evidence-based information to support evidence-based medicine.



Clinic to Cloud

Clinic to Cloud has the features required to run a practice and care for patients effectively.

Innovative, cloud-based, speech enabled and with comprehensive Australian medicines information and an evidence-based decision support tool powered by MIMS, Clinic to Cloud is easy to use and to deploy.

Adding MIMS was an imperative said Rafic Habib, CEO of Clinic to Cloud "Our clinicians and customers are familiar with MIMS; they value and trust MIMS." Mr. Habib went on to say that "By engaging with our users we will continue to add features and value to the user to ensure their experience is enjoyable as well as creating efficiencies for the practice."

Clinic to Cloud (C2C), a name that is as simple and direct as it sounds, was founded by a group of people who have many years of medical industry experience; some are clinicians, but all are passionate about the health space, the concept and the way medicine is practiced.

Clinic to Cloud is a true cloud-based practice and clinical management application that is hosted by Microsoft Azure (in Sydney and Melbourne data centres) and takes care of scheduling, billing, reporting, clinical care and much more. C2C has powerful integrations such as Medicare, MIMS, Origin Speech and SMS reminders.

C2C also offers the clinician powerful mobile applications that include access to their scheduler, patient demographics, clinical data and eTasks from their iOS or Android smartphone. Finally, yet importantly, the patient portal allows the patient to register with the practice and interact via a secure login.

"Clinic to Cloud is highly secure, available, affordable, and scalable. Innovation is at the heart" said Mr. Habib.

Both MIMS and Clinic to Cloud use cloud applications because they do not require downloading or installing, nor do they require specialised hardware. Access is from any device that is connected to the internet and has a supported browser installed. Patient care, medication management, and running a practice becomes seamless from an IT perspective, while providing the clinicians and practice staff with mobility allowing focus on patient care.

Medication errors are one of the most common causes of harm in healthcare with 50% considered preventable. The driving force of MIMS is an uncompromising mission to provide the knowledge, which can deliver better health outcomes. Siobhan Murphy, Country Manager of MIMS Australia said "Through effective implementation of our information, such as we see in Clinic to Cloud, MIMS can enable safer prescribing and help clinicians avoid potential medication errors and drug interactions."

Ms. Murphy went on to say "Our partnership with Clinic to Cloud consolidates our position as Australia's preferred source of medication decision support for both primary and acute care clinical software providers."

Z Software

Z Software, one of MIMS integrated data dispensing software partners has announced a new partnership deal with Pharmacy Alliance, which will ensure that the groups 504 members have access to Z Software's front and back of shop solutions. Z Dispense was one of the first dispensing systems in Australia to integrate the MIMS medicines data base and decision support modules. In Z Dispense, Z Software provides a suite of evidence based drug interactions, TGA approved PIs, CMIs and drug images to ensure that the data is readily available at the point of dispensing. This information and knowledge from MIMS now powers applications such as electronic medical records (EMR), electronic medication management (EMM), primary and specialist prescribing, pharmacy dispensing and clinical quality and safety solutions as well as websites such as the NPS and ASADA.

Pharmacy Alliance CEO Darren Dye said "I am extremely excited that we can provide our 504 members with a best-in-class, simple dispensing solution with advanced patient management and fully integrated POS that incorporates advance reporting and analytics."

Medications are core to the prevention and treatment of disease, improving quality of life and increasing life expectancy; however, it is well documented that inappropriate medication management can lead to significant adverse events. Community pharmacy is at the forefront of patient safety and the quality use of medicines. Having MIMS integrated into Z Dispense provides pharmacists with medicines knowledge in a way that can be leveraged in each clinical setting. The information enables clinical decision making that improves patient outcomes and sustainable cost effective choices. Because the information is available at the point of dispensing, risk is reduced and patient safety enhanced.

The team at Z believes that software development should be an evolution, a perpetual cycle of adapting and developing to new technologies and are constantly striving towards empowering pharmacies with the capabilities to achieve. Their dispensing system is feature rich and built for efficiency and ease of use. The dispense workflow is even adaptable to best suit individual pharmacists' needs.

Both MIMS and Z Software have an eye on the future believing that all dispensing software will see the medicines information now regarded as reference, available at the point of dispensing with content and functionality that is designed to directly impact on patient outcomes.

PSA, MIMS Inaugural Intern of the Year

The moment Laura Norman from country NSW knew she was the inaugural PSA MIMS Intern of the Year

Laura Norman from Gunnedah, in country NSW was named as the inaugural PSA, MIMS Intern of the Year during a ceremony at PSA15, in Sydney, in early August. This award, which the team at MIMS are so pleased to be able to provide, recognises an intern pharmacist who is working in community or hospital practice, has shown outstanding performance in their development as a professional pharmacist and is a role model amongst early career pharmacists.

Finalists were judged on their achievements in leadership, commitment to patient care and the safe use of medicines, initiative in pharmacy service delivery, and peer and professional engagement.

Laura completed her intern year in 2014 at Karen Carter Chemist, Gunnedah, where she displayed a genuine commitment to excellence in pharmacy practice and clinical knowledge above and beyond the average intern.

During her intern year, Laura demonstrated outstanding involvement in the health and wellbeing of her community. She improved the health outcomes of many patients through various training and educational roles, campaigns and studies and has volunteered in local community events in the name of pharmacy.

Just one example of this is that Laura instigated a COPD screening campaign, fifty (50) patients were recruited in a four week period with ten (10) of those being referred their GP for further consultation.

NSW Branch President Dr Stephen Carter said, when he presented the State award back in March, "Laura has the capacity to educate and interact confidently with customers, pharmacy staff and other healthcare professionals and clearly meets the terms if the award."

All the State winners should be congratulated for their work and projects they instigated during 2014. Their stories are all full of community engagement and understanding the needs of their patients and customers. It is an enormous pleasure for the team at MIMS to be supporting the interns with this very significant award and ensuring some recognition for young pharmacists displaying outstanding ability.

Both MIMS and PSA are proud of this award, which also underscores our commitment to young pharmacists just starting out on their career journey.

The State and Territory finalists were:

Brendon Wheatley	ACT
Laura Norman	NSW
Neslihan (Nes) Kartal	Victoria
Alexandra Pitiris	Queensland
Philip Spyrou	SA/NT
Monica Sajogo	Western Australia
Caitlyn Duff	Tasmania

Cochrane Review Proves Interesting[1]

In 2011 an interesting Cochrane Review of interventions to improve safe and effective medicines use by consumers was published. This review has been recently updated, with a further 38 studies identified and added to the original 37 - a now impressive body of evidence.

Strategies to help improve consumers' use of medicines are obviously of great interest to everyone, from the consumer themselves, to their doctor, pharmacist and the healthcare system. Using medicines effectively can be the difference between a consumer experiencing therapeutic benefits, to the medicines having no effect or even resulting in a minor or major medicines adverse event. Another factor to consider is how to maximise the effectiveness of the healthcare dollar - and using medicines wisely and effectively is obviously key to this.

In this review, the authors looked at a wide variety of strategies, ranging from medicines reminder devices through to financial interventions. Whilst there is variability across populations and outcomes, the authors concluded that in general, medicines self-monitoring and self-management programmes seem to be the most consistently effective at improving things like adherence and clinical outcomes. Other interventions they identified as promising were: simplifying the dosing regimen, e.g. reducing administration frequency from four times daily to twice daily, and involving pharmacists in medicines management e.g. medicines reviews.

Given the significant investment that is made in trying to improve the use of medicines by consumers, a review like this is very useful in being able to identify where the evidence supports certain intervention strategies and where the evidence is lacking. The hope is that with information such as this we can be increasingly targeted in developing programmes that have a high rate of success, resulting for better outcomes for consumers, healthcare providers and Governments.

[1] Ryan R, Santesso N, Lowe D, Hill S, Grimshaw J, Prictor M, Kaufman C, Cowie G, Taylor M. Interventions to improve safe and effective medicines use by consumers: an overview of systematic reviews (Review). The Cochrane Library, 2014, Issue 4.

MIMS Staff Profile

Shradha Jain
Customer Services Officer

What is your role at MIMS?

My role requires me to provide outstanding service to both internal and external customers by ensuring MIMS Australia delivers, distributes and manages all products and services in a timely and customer focused manner.

As a Customer Service Officer I am responsible for answering customer queries relating to MIMS products or subscriptions by phone, email or fax. This includes resolving product or service related concerns and selecting and explaining the best solution to meet customer needs. I provide first-level technical support to customers for digital products including eMIMS Desktop and Cloud, and mobile device applications for Android and iOS. I also maintain the financial accounts by processing customer payments or adjustments every day.

What is your background?

I have a Bachelor's Degree in Business Administration from the University of Delhi. I am also a certified Six Sigma White Belt. I have undertaken different roles and responsibilities in my professional career in the field of customer service within Banking and FMCG industry.

Prior to MIMS, I worked as a Complaints and Grievance Analyst with Teleperformance for Procter & Gamble in the Philippines. I also worked for Barclays Bank UK, as a Quality Evaluator and have worked on various process improvement projects. I have been lucky enough to deal with customers and clients from different geographies of the world which helped me to understand the basics of great customer experience!

What do you enjoy the most about your role?

The most fulfilling experience is to be able to make an otherwise ordinary day pleasingly memorable for someone by delivering excellent customer service. This job gives me many such instances every day.

I am one of the newest members at MIMS as I only joined in autumn this year, so there are lots of new and challenging things to learn every day which in itself is very exhilarating. I am surrounded by the smartest brains in the field of medicine and I can say they are the warmest bunch I have ever met.

What do you enjoy outside the office?

I enjoy exploring new places and believe travelling leaves you enriched and makes you a better person. There is so much to discover, to know, to explore and understand, and travel is a means to do that.

I am an amateur photographer who likes capturing beautiful moments of the places I visit or the food I eat. I also love adventurous activities that give an adrenaline rush, such as bungee jumping, swimming with whale sharks and dolphins or petting wild crocodiles.

Upcoming Conferences

RACGP – GP'15 Conference

Monday 21st September to
Wednesday 23rd September
Melbourne Convention and Exhibition Centre
http://racgpconference.com.au/
Come and see us at Booth 625

BP 2015 Summit

Friday 4th September to
Sunday 6th September
Sea World Resort, Gold Coast
http://www.bpsoftware.net/bp-summit/

MIMS
100% pure knowledge

Contact:

MIMS Australia Pty Ltd 2nd Floor, 1 Chandos Street St Leonards NSW 2065
Locked Bag 3000 St Leonards NSW 1590 Phone: (02) 9902 7700 Facsimile: (02) 9902 7701

ACN: 050 695 157, ABN: 68 050 695 157

E-mail: info@mims.com.au **www.mims.com.au**

Support

Customer Service: 1800 800 629 E-mail: support@mims.com.au