
CASE STUDY

EPAM & MEMORIAL SLOAN
KETERING INCREASE
PATIENT ENGAGEMENT
THROUGH MOBILE APP FOR
TEENAGE & YOUNG ADULT
CANCER PATIENTS

ABOUT MEMORIAL SLOAN KETTERING

Memorial Sloan Kettering Cancer Center (MSK) is the world's oldest and largest private cancer center, devoting more than 130 years to exceptional patient care, innovative research and outstanding educational programs. With nearly 600,000 patient visits each year, MSK physicians and scientists work very closely to provide patients with the best care available. At any given time, close to 1,000 teenagers and young adults aged 16-30 are undergoing diagnosis and treatment at MSK.



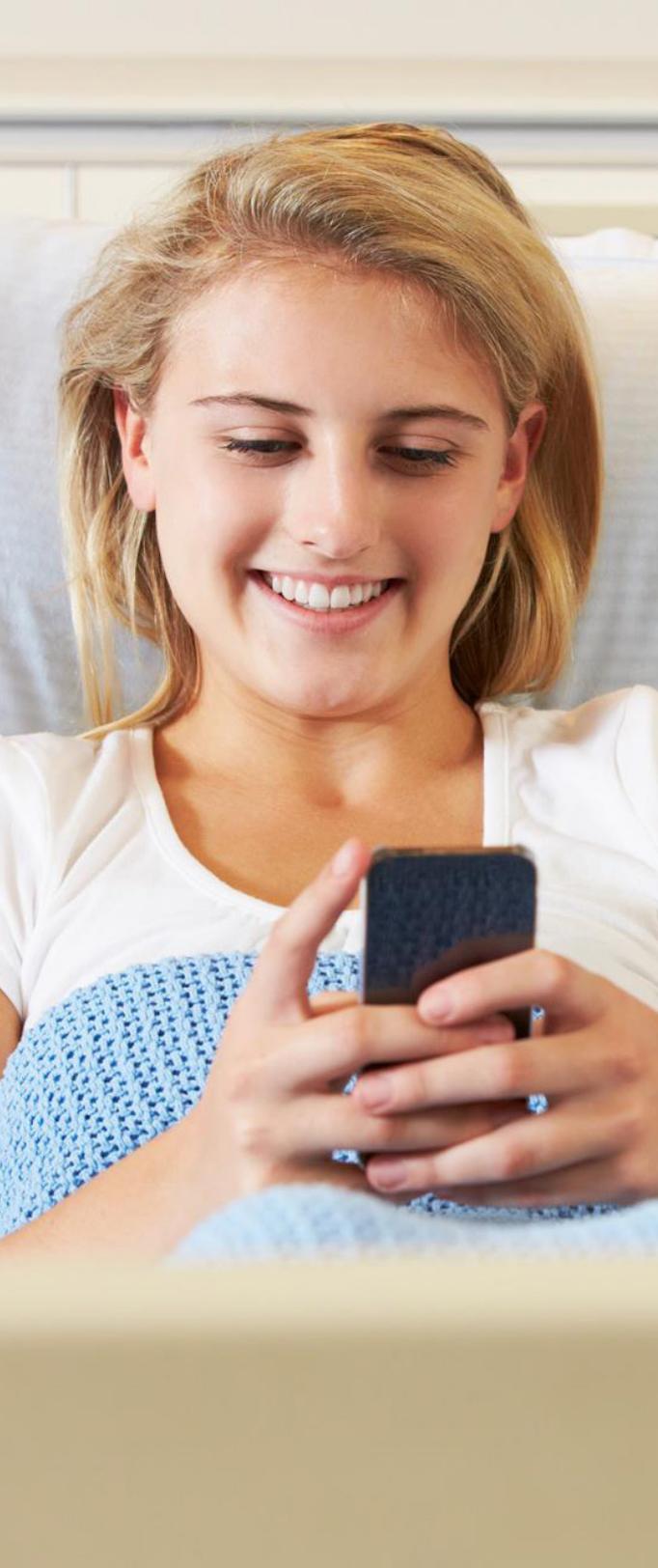
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After working together for 13 years, Memorial Sloan Kettering (MSK) engaged EPAM to develop an application for teenage and young adult cancer patients as part of their new Teen and Young Adult Program (TYA@MSK). The goal was to create a virtual community for patients to safely ask questions, connect with peers and find resources. Within eight months, EPAM delivered a user-friendly and engaging mobile app that ultimately improves the patient experience and promotes independence and well-being in the MSK community.

MSK & EPAM'S 13-YEAR COLLABORATION

When EPAM and MSK first began working together in 2004, EPAM developed several internal systems to help MSK manage their animal research lab, as well as their grants and the graduate application process for the Sloan Kettering Graduate School of Biomedical Sciences. Over the last few years, EPAM's work with MSK has shifted to focus on patient engagement, specifically through the development of mobile applications. EPAM developed *MyMSK Mobile*, an app for patients to securely access information about their care including the ability to view and share lab and radiology results, communicate with their doctor's office and manage their appointments. Additionally, EPAM built *MSK Engage*, a patient engagement platform – supported by rules-driven, dynamic surveys – that captures patient medical history and outcome information, allowing MSK to streamline data collection and help clinical staff with decision support.



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VIRTUALLY CONNECTING TEENAGE & YOUNG ADULT CANCER PATIENTS

Cancer diagnosis and treatment is often very isolating, and young adult patients especially benefit from the support of their peers who are going through similar experiences. With hundreds of teenagers and young adults undergoing treatment, MSK launched its Teen and Young Adult Program (TYA@MSK) to offer special services and meet the unique needs of these patients across all MSK sites. As part of the initiative, TYA@MSK built *The Lounge*, a space complete with modern technology, comfortable furniture, a communal work space and snack bar, and also created a support program called *Peer-2-Peer* to connect current patients with those who have completed treatment.

MSK engaged EPAM and Moment to work together to develop a mobile application for TYA@MSK. EPAM was responsible for determining the technology stack and building the app. The goal was to provide a safe and protected platform for patients to ask questions, engage with peers, find resources and receive information about programming and events.

TECHNOLOGIES USED:

- Cordova
- Gulp
- Jasmine
- Karma
- ReactJS
- Redux
- .Net

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DEVELOPING A SOCIAL NETWORKING APP TO ENGAGE PATIENTS & PROVIDE RESOURCES

EPAM first helped MSK decide between native and hybrid approaches for development. To address concerns about potential UX issues with cross-platform technologies, EPAM created two prototypes of the app – native and cross-platform – to blind-test with MSK. After testing, the cross-platform app using Cordova and React became the preferred path.

With the development path identified, EPAM worked closely with Moment and MSK in an agile approach that featured two-week sprints and provided a demo of interim results after each sprint. The final application combines a modern social experience with MSK-driven forums and educational materials, and includes the following features:

- News feed for information and updates
- Search functionality to find other patients based on location, cancer type, interests or other demographics
- Ability for patients to network, engage, ask questions, share photos or send private messages to other patients
- List of events, including programming and social meetups at The Lounge
- Unique and secure passcode automatically generated for each patient
- Back-end platform for the MSK care team to provide materials, moderate discussions, answer questions and post events
- Integration with other MSK websites and apps to pull in relevant cancer care information
- Monitoring functionality for MSK to safeguard against shared medical information or suspicious account activity

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IMPROVING THE PATIENT EXPERIENCE THROUGH INCREASED CONNECTION & SUPPORT

After eight months, EPAM and Moment delivered the Lounge application and it went live on the App Store in April 2017. In keeping with MSK's goals, the Lounge app provides a virtual community for teenage and young adult cancer patients to meet and support others going through similar experiences, ask questions and connect in a secure space. The app, along with the other services provided by TYA@MSK, significantly improves the patient experience and promotes independence and well-being in the MSK community.

IF YOU ARE INTERESTED IN
LEARNING MORE ABOUT EPAM'S
EXPERTISE IN HEALTHCARE OR
MOBILE APP DEVELOPMENT,
PLEASE CONTACT US TODAY.

CONTACT US AT
SALES@EPAM.COM

 For more information,
PLEASE VISIT EPAM.COM

