



Research 2 Guidance

A hand holding a white smartphone, with a blurred background showing a medical device with a green cross icon.

Pharma App Benchmarking 2017

How Pharma Manage Innovation with Mobile Apps
(Version 2)

www.research2guidance.com

Analysis and comparison of the app portfolios and digital health ecosystems of top 12 Pharma companies (v.2)

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1. SCOPE OF THE REPORT

Since the first report about the app publishing activities of leading Pharma companies was published in 2014, companies have intensified their activities in the digital health market. This report analyses the current status of the app publishing activities of the twelve leading Pharma companies globally. It also analyses newly established channels that Pharma use to partner with 3rd party companies, including accelerators/incubators, investment funds and direct partnerships.

The research provides a detailed perspective on the current status of the digital health activities, on a market and company level. It compares the digital health activities that Pharma companies concentrate on, and how successful they are. The report also highlights how app publishing strategies have changed over the last three years.

Companies in scope: Abbvie/Abbott, Astra Zeneca, Bayer HealthCare, Bristol-Myer Squibb, GlaxoSmithKline (GSK), Johnson&Johnson (J&J), Merck, Merck Sharp & Dohme (MSD), Novartis, Pfizer, Roche and Sanofi.

Apps in scope: All apps available in the Apple App Store (iTunes store) and in Google Play Store which have been published by one of the app publishing entities of the companies in scope.

Regional scope: Global

Time frame: 2013- Q1 2017

Where a reference to a data source on a figure isn't mentioned, the data source used is either Priori Data or App Annie. Any app descriptions mentioned are taken from the relevant app store. Where an app description is in a foreign language, it is translated to English (UK).

The research behind these reports has not been commissioned or sponsored in any way by any business, government, or other institution.

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2. MANAGEMENT SUMMARY

This report is purposed as an update on how Pharma companies are driving digital innovation with the help of mobile apps, and their connected devices and services.

The adoption process of digital innovation in Pharma is driven through four main channels; internal app publishing, accelerator or incubator programs, venture fund investments, and direct partnerships. Currently, Pharma companies are favouring the app publishing channel.

In Q1 2017 there were a total of Xx apps listed on Apple App and Google Play stores by leading Pharma companies (Xx CAGR). Within the last two years, Xx+ net additions of apps have been released on major app stores, almost 6x more than announced partnership deals and investments into digital health companies. From 2014 to 2016 there were a few more than Xxx digital health deals recorded between leading Pharma companies and 3rd party mHealth companies.

Pharma companies still have a preference for iOS in relation to their own app publishing activities. However, the dominance of iOS over Android is slowly balancing, as both supply (apps) and demand (downloads) increases to favour Android. Multi-platform is becoming more common (Xx%, up from Xx% in 2014).

Annual downloads for Pharma apps in 2016 came to Xx, up from Xx in 2014. The monthly active user-base share also increased to Xx, up from Xx in 2014, but user retention is still an issue for Pharma app publishers.

Since 2014 the significance of top 20, 10 and 5 apps decreased in terms of reach. Top 20 apps (or Xx% of available Pharma apps) now contribute Xx% to total downloads (down from Xx% from 2014). This translates into only Xx average downloads (2016) for the majority of their apps (Xx%) in their portfolio.

All companies have increased the size of their active app portfolios, with companies such as Merck, Novartis, Pfizer, Bayer and Roche more than tripling their market presence since 2014. However, only one company published a *block-buster* of an app which achieved more than Xx downloads for 2016; Xx. The five most downloaded apps within the portfolios of leading Pharma companies are; Xx by Xx, Xx by Xx, Xx by Xx, Xx by Xx and Xx by Xx.

Only Xx% of the Pharma apps have managed to gain a reach within their target groups of more than Xx annual downloads. In 2014, nearly Xx% of apps managed to achieve this.

Compared to 2014, Pharma companies are more and more targeting the individual user over the HCP¹ with their app portfolio. Today, the average share of leading Pharma company app portfolios that target the individual user has increased from Xx-Xx%.

The app category shares within app portfolios have changed only marginally since the last publication of this report. Pharma companies have decreased their focus on publishing apps for HCP-facing reference apps for e.g. diseases, treatments and medications (Xx%, down from Xx% in 2014), in favour of individual-facing medical education apps (Xx%, up from Xx% in 2014). Their portfolios still differ from the rest of the mHealth app market in terms of category preferences, but have become more similar compared to 2014.

Xx can be seen at the forefront of the Pharma world when it comes to making use of digital health innovation. Their venture arm, Xx, is actively investing into digital health companies, and their involvement with larger accelerator programs such as Xx and Xx ensure that they have a constant flow of digital health start-ups to be evaluated. Their internal app portfolio focuses primarily on supplying apps for the individual user. With

¹ HCP: Healthcare Professional

leading apps breaking the Xx annual download mark, it is safe to say Xx have one of the most successful app portfolios in terms of reach.

Xx is one of the more active leading Pharma companies in digital health. Their internal app publishing activities continue to grow their portfolio size on both iOS and Android platforms, while their external app ecosystem is strengthening with the help of accelerator programs and venture funds to source digital health innovation.

Xx is notorious in the world of digital health for its Xx accelerator programs. Since its launch, the company has used the accelerator channel to partner with over Xx digital health start-ups. The company is rolling out the Xx accelerator program to other regions in the world, now counting Xx branches (including Xx, expected to launch this year). In terms of driving digital innovation with their own app publishing projects, Xx is one of the more active among the leading Pharma companies (Xx apps in Q1 2017 up from Xx in 2014). However, a large portion of their internally published apps are not related to digital health.

On the other end of the scale, Xx has both the least amount of active app publishers (equal to Xx) and apps published of all leading Pharma companies. Their app portfolio in fact goes against the major trends; their app portfolio is barely growing (from Xx to Xx apps available Q1 2017), and their share of individual facing apps is decreasing. Only minor changes have been noted in their app portfolio since the previous edition of this report in 2014.

Since the last report was released in 2014, companies made significant efforts to improve the outcome of their digital health initiatives. Over the next 2-3 years, companies will have to channel their activities into three major directions. In order to maximize benefits, Pharma companies will have to;



What this all means, is that before moving forward in the same direction, Pharma companies should rethink their digital app strategy. Otherwise, Pharma will remain an industry with low impact on the mHealth app market. While presently this is not a serious threat to their core business, pressure is expected to build over the next three years.

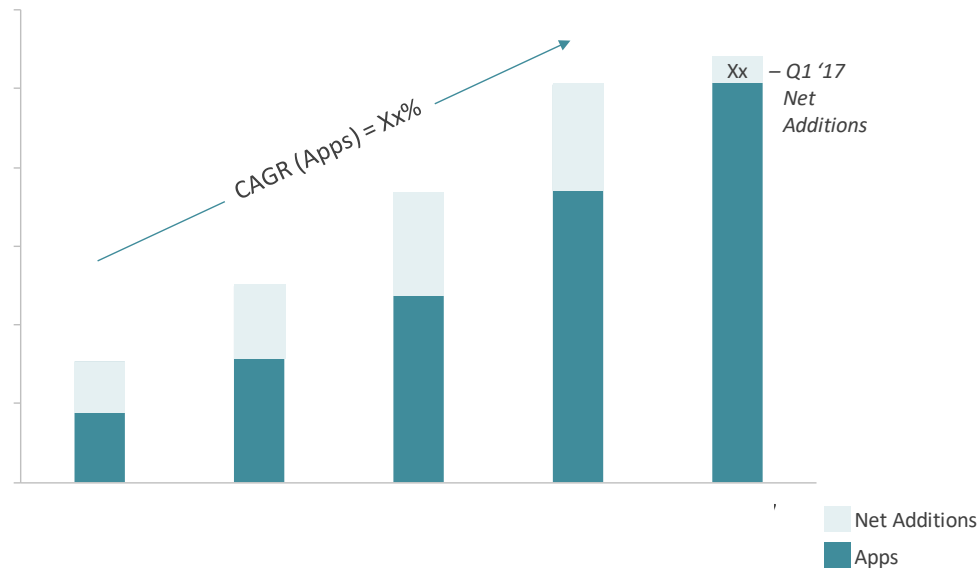
4. THE APP PUBLISHING ACTIVITIES OF TOP PHARMA COMPANIES

Since the first edition of this report in 2014, Pharma has significantly intensified their own app publishing activities. The number of apps that the leading 12 Pharma companies have published onto the Apple App Store and Google Play Store reached Xx in Q1 2017. App supply has more than doubled since 2014 at a rate of Xx% CAGR. Every month, leading Pharma companies are releasing Xx new apps on average to the market.

For the purpose of this analysis, apps that may be published in multiple countries and on multiple platforms, but with one functionality, design and usability, are counted as one app, and may be referred to as “unique”.

In addition to this increase in app supply, Pharma companies also extended their multi-platform presence. The share of apps that have been published across both Apple App and Google Play Stores (iOS and Android) has also increased to Xx% (Xx% in 2014).

Figure 1: Number of apps and net additions of the top 12 Pharma companies (2013-Q1 2017)



Note: An app that is listed on both iOS & Android, or has multiple country versions is counted as one app. Data includes apps up to date of extraction; 03.05.17.
Source: Research2Guidance (2017); Apple App Store; Google Play.

App publishing strategies have become increasingly Xx. Apps of the top 12 Pharma companies have been published by Xx different entities, up from Xx in 2014.

Alike 2014, Xx and Xx continue to have the most Xx app publishing strategy, with their apps being published by Xx and Xx entities respectively. Xx now closely follows with a total of Xx app publishers.

5. TOP 12 PHARMA COMPANY APP PORTFOLIO COMPARISON

The app activities of the leading Pharma companies show significant differences between each other in the number of active apps published, total downloads, and app category focus. Generally speaking, while Xx has gained more traction, and the top 20 apps have become less Xx, some of the leading Pharma companies have demonstrated the contrary.

5.1. COMPARISON OF APP PORTFOLIO PERFORMANCE

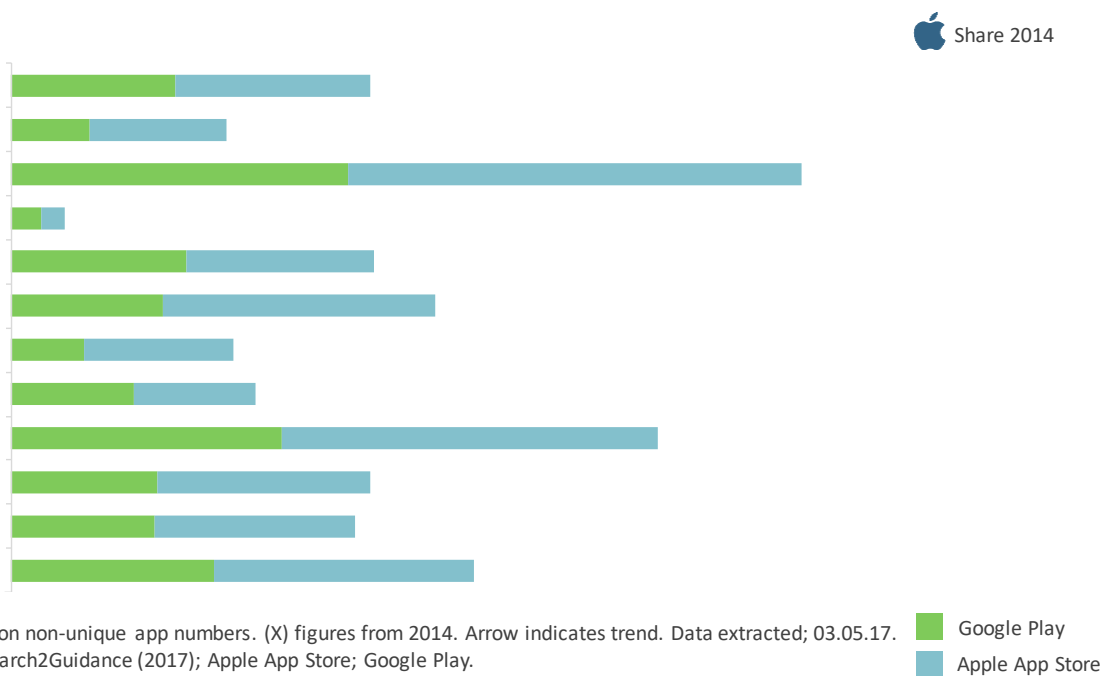
All companies have increased the size of their active app portfolios, with companies such as Xx, Xx, Xx, Xx and Xx more than Xx their market presence since 2014.

Currently, Xx out of twelve leading Pharma companies have more than Xx apps available on both Apple App and Google Play Stores. Previously, this was only the case for Xx out of twelve.

In line with the overall increase in market traction of Xx, the Xx share has increased against Xx for all but Xx Pharma company (Xx), which hasn't changed since 2014. Both Xx and Xx have now evened up their share of app supply to cater for both platforms.

Xx, Xx, Xx, Xx and Xx have more than Xx their market presence since 2014

Figure 2: Number of apps published by platform for each top Pharma company (2014-Q1 2017)



6. TOP 12 PHARMA COMPANY APP PROFILES AND DIGITAL HEALTH INNOVATION ACTIVITIES

6.1. ABBOTT/ABBVIE APP PROFILE

Abbott/Abbvie has one of the most Xx app publishing strategies of the leading Pharma companies. Within the last two to three years they have over Xx their app portfolio size, but are yet to gain significant traction in their new target market; the individual user. Their venture capital arms have invested into digital health-related technologies and innovation but app publishing seems to be the main channel for bringing digital innovations into the company.

6.1.1. INTERNAL APP PUBLISHING











Abbott/Abbvie has aggressively Xx their app portfolio over the last two years by adding an additional Xx apps, totalling now Xx apps in their app portfolio. The company has also shifted their focus from targeting mainly HCP's, to directly providing mobile app based services for patients and individual users to support healthy lifestyles. The share of apps within the Abbott/Abbvie app portfolio that target the HCP has decreased from Xx% (2014) to Xx% (Q1 2017).

Xx% of the Abbott/Abbvie app portfolio now targets the individual user with apps such as "Xx" (a medical condition management app for Crohn's disease), "Xx" (a baby tracking app), and "Xx" (a therapy compliance app).

In terms of platform preference, their app portfolio remains focused on Xx, with both the supply and demand of Xx apps higher than Xx. However, even though AnXxdroid achieved fewer 2016 downloads, the average download per Xx app is higher than Xx. This increase in Xx app supply and demand is a common trend currently experienced throughout the Pharma app market.

Abbott/Abbvie continues to be one of the most centralised publishers, with the Xx least number of publishing entities of all companies (Xx) on both Apple App and Google Play stores.

Figure 3: Abbott/Abbvie app - key metrics (2014-Q1 2017)²

# of apps			# of publishers	# of downloads (2016)		Ave. DL per app		Target group		MAU
Year			 & 					Individual	HCP	 & 
Q1 2017	Xx	Xx	Xx	Xx	Xx	Xx	Xx	Xx%	Xx%	XxK
2014	Xx	Xx	Xx					Xx%	Xx%	XxK
Top individual user app			Xx			Xx				
Top HCP user app			Xx			Xx				

Abbott/Abbvie has diversified their app portfolio to include three additional categories for Q1 2017; Children's Health (Xx%), Compliance (Xx%) and Women's Health (Xx%). Their main app category, Xx, has significantly decreased its majority share from Xx-Xx%. This change, coupled with the increase in supply of Xx apps from Xx-Xx%, reflects Abbott's shift of intended app user from the HCP toward the individual. Other major shifts in category shares include a decrease in supply of Xx apps from Xx-Xx%, and Xx from Xx-Xx%.

² MAU: Monthly Active User aggregated for iOS and Android (if applicable).

8. APPENDIX

8.1. ABOUT RESEARCH2GUIDANCE

Research2Guidance is a strategy advisory and market research company. We concentrate on the mobile app eco-system. We are convinced that mobile health solutions will make a difference to people's lives and that the impact on the healthcare industry will be significant. We provide insights to make it happen and to successfully lead your business.

Research2Guidance

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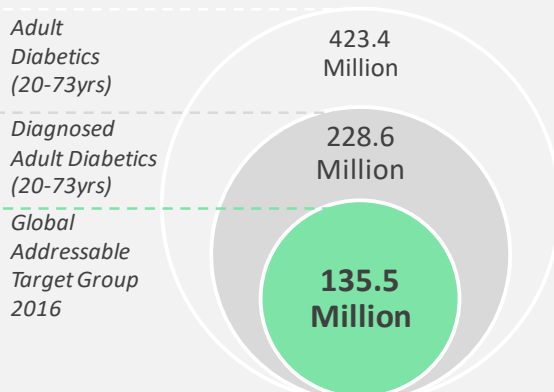
We also recently published a report about the Diabetes App Market:

DIABETES APP MARKET REPORT 2016-2021

135.5 Million diagnosed diabetics can potentially benefit from diabetes app service offerings in 2016.

Find out what's happening in the diabetes app market space with the 2nd edition of the **DIABETES APP MARKET REPORT 2016-2021**.

This report provides readers with a comprehensive analysis of the past, present and future global and country-specific markets, diabetes app performance, key players, best practices, evolving strategies, market trends and revenues covering 2008-2021.



Diagnosed Diabetics x SmartPhone and/or Tablet Penetration Share = Global Addressable Target Group
Source Data: research2guidance, eMarketer (2015), IDF Diabetes Atlas, 7th Edition (2015), Pew Research Center (2016)

Find a detailed report description on our web site.

www.research2guidance.com



- Market forecast 2021
- Revenue forecasts for diabetes app services, connected devices, premium content and advertisement
- Top 10 publisher profiles
- Top 10 local markets sizing
- 85 pages, 59 figures & tables

8.2. ABOUT THE AUTHORS



Ralf-Gordon Jahns

Ralf is the Research Director of research2guidance. He has worked for more than 19 years in the telecom and media industry. Prior to Research2Guidance he was a partner and member of the leadership team of Capgemini Telecom Media & Networks. Ralf is a frequent keynote speaker on mobile industry events, publisher of a multitude of mobile app market reports and executive consultant of more than 30 clients in the mobile and app industry.



David Ireland

David is an experienced Analyst and Consultant at Research2Guidance. He has been involved in multiple client projects for larger pharma, health insurers, and other fortune 500 clients, and contributed to multiple publications. His diverse work and study experience in Health and Finance have equipped him with the knowledge and skills to excel digital health. David holds a Bachelor's in Health Science, majoring in Public Health and Health Service Management from the Queensland University of Technology, Australia.

8.3. PHARMA APP CATALOGUE (LIST OF APPS BY COMPANY AND PLATFORM)

Table 1: List of apps (Q1 2017)

Company	Platform	Title	Category
Abbott	iOS & Google Play	1.62% Treatment Experience™ app	Medical Condition Management
Abbott	iOS & Google Play	Abbott Brand Info	Other
Abbott	Google Play	Abbott Endocrinology Videos	Medical Education
Abbott	iOS & Google Play	Abbott eStore SG	Other
Abbott	iOS	Abbott FISH Chromosome Search	Medical Education
Abbott	iOS & Google Play	Abbott Generics	Other
Abbott	iOS	Abbott IOL Vision Simulator	Medical Education
Abbott	iOS	Abbott Nutrition - Nepro nPCR Calculator App	Tools
Abbott	iOS & Google Play	Abbott Nutrition Dietetic Tools	Tools
Abbott	iOS & Google Play	Abbott Nutrition HCP App	Medical Reference
Abbott	iOS	Abbott Nutrition Product Guide	Medical Reference
Abbott	iOS	Abbott Promoters	Other
Abbott	iOS & Google Play	Abbott SMART Meetings Solutions	Other
Abbott	iOS & Google Play	Abbott Wound Monitor	Medical Reference
Abbott	iOS & Google Play	AbbVie Care Malaysia	Medical Condition Management
Abbott	Google Play	AbbVie Congress TV	Other
Abbott	iOS & Google Play	AbbVie Mobile News	Other
Abbott	iOS & Google Play	AbbVie Plusz	Medical Condition Management
Abbott	iOS & Google Play	AbbVie Supply Chain Mobile App	Medical Reference
Abbott	iOS & Google Play	AbbVie3D	Medical Reference
Abbott	iOS & Google Play	Asistanim AbbVie	Compliance
Abbott	iOS & Google Play	Calculadora ASRVD	Tools
Abbott	iOS & Google Play	CARMELIA	Medical Condition Management
Abbott	iOS & Google Play	CED App	Medical Reference
Abbott	iOS & Google Play	CED Dokumentation und Tipps	Medical Condition Management
Abbott	iOS & Google Play	ChampsRun	Other
Abbott	Google Play	Complete - Medication Tracker	Compliance
Abbott	iOS	Complete Injection Medication Tracker and Reminder	Compliance
Abbott	iOS	CPP Tracker	Medical Condition Management
Abbott	iOS & Google Play	Diabetes menú	Nutrition & Wellness
Abbott	iOS & Google Play	docXchange	Other
Abbott	iOS & Google Play	Easy Heart	Medical Education
Abbott	iOS	eHaq	Tools
Abbott	iOS	Endofacts: Road to Relief	Medical Education
Abbott	iOS & Google Play	e-WhatsUp	Other
Abbott	Google Play	FreeStyle Diabetes Companion	Medical Condition Management
Abbott	iOS & Google Play	Gerendia	Other
Abbott	iOS	Glucerna MY	Medical Condition Management
Abbott	iOS	Glucerna PH	Medical Condition Management
Abbott	Google Play	Grow Moi Ngay	Children's Health
Abbott	iOS	HCV Life Cycle by AbbVie	Medical Education
Abbott	iOS & Google Play	HEPVie	Medical Reference
Abbott	iOS & Google Play	Injection Tracker	Fitness (Health Improvement)
Abbott	iOS & Google Play	Kaun Banega Nutrition Champ	Other
Abbott	iOS & Google Play	KlarApp	Children's Health
Abbott	iOS & Google Play	KlarMed	Compliance
Abbott	iOS & Google Play	Knowledge Genie	Medical Education
Abbott	iOS & Google Play	Liver Is Life	Medical Education
Abbott	iOS & Google Play	Meu Contraceptivo	Women's Health
Abbott	Google Play	MIP App	Other
Abbott	iOS	MIP, Mensaje de Inclusión de Pacientes	Medical Reference
Abbott	Google Play	My IBD passport	Medical Condition Management
Abbott	Google Play	My Rheumatology passport	Medical Condition Management
Abbott	iOS & Google Play	myStarlims	Medical Reference

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