

Multimedia Appendix 1:

Infodemiology and Infoveillance: A Scoping Review

Table A1 consists of the complete list of the 338 extracted publications from the JMIR, PubMed, and Scopus databases in the fields of Infodemiology and Infoveillance from 2009 to 2018.

Table A1. List of Infodemiology and Infoveillance Publications from JMIR, Scopus, and PubMed (2009-2018)

Authors	Year	Title	Journal	
1	Abbate et al	2017	Recruiting Women to a Mobile Health Smoking Cessation Trial: Low- and No-Cost Strategies	JMIR Research Protocols
2	Abbe & Falissard	2017	Stopping Antidepressants and Anxiolytics as Major Concerns Reported in Online Health Communities: A Text Mining Approach	JMIR Mental Health
3	Abdellaoui et al.	2017	Filtering Entities to Optimize Identification of Adverse Drug Reaction From Social Media: How Can the Number of Words Between Entities in the Messages Help?	JMIR Public Health and Surveillance
4	Abdellaoui et al.	2018	Detection of Cases of Noncompliance to Drug Treatment in Patient Forum Posts: Topic Model Approach.	Journal of Medical Internet Research
5	Adams	2013	POST-PANOPTIC SURVEILLANCE THROUGH HEALTHCARE RATING SITES: Who's watching whom?	Information Communication and Society
6	Adawi et al.	2017	Discrepancies Between Classic and Digital Epidemiology in Searching for the Mayaro Virus: Preliminary Qualitative and Quantitative Analysis of Google Trends	JMIR Public Health and Surveillance
7	Adrover et al.	2015	Identifying Adverse Effects of HIV Drug Treatment and Associated Sentiments Using Twitter	JMIR Public Health and Surveillance
8	Adusumalli et al.	2015	Assessment of Web-Based Consumer Reviews as a Resource for Drug Performance	Journal of Medical Internet Research
9	Agarwal et al.	2016	Impact of Predicting Health Care Utilization Via Web Search Behavior: A Data-Driven Analysis	Journal of Medical Internet Research
10	Albalawi & Sixsmith	2015	Agenda Setting for Health Promotion: Exploring an Adapted Model for the Social Media Era	JMIR Public Health and Surveillance
11	Allem et al.	2017	Images of Little Cigars and Cigarillos on Instagram Identified by the Hashtag #swisher: Thematic Analysis	Journal of Medical Internet Research
12	Allem et al.	2018	Hookah-Related Posts to Twitter From 2017 to 2018: Thematic Analysis.	Journal of Medical Internet Research
13	Allem et al.	2017	E-Cigarette Surveillance With Social Media Data: Social Bots, Emerging Topics, and Trends.	JMIR Public Health and Surveillance
14	Allem et al.	2017	Identifying Sentiment of Hookah-Related Posts on Twitter	JMIR Public Health and Surveillance
15	Alnemer et al	2015	Are Health-Related Tweets Evidence Based? Review and Analysis of Health-Related Tweets on Twitter	Journal of Medical Internet Research
16	Alvarez-Mon et al.	2018	Increasing Interest of Mass Communication Media and the General Public in the Distribution of Tweets About Mental Disorders: Observational Study	Journal of Medical Internet Research
17	Alvaro et al.	2017	TwiMed: Twitter and PubMed Comparable Corpus of Drugs, Diseases, Symptoms, and Their Relations	JMIR Public Health and Surveillance
18	Anderson et al.	2017	Using Social Listening Data to Monitor Misuse and Nonmedical Use of Bupropion: A Content Analysis.	JMIR Public Health and Surveillance
19	Aoki et al.	2018	Analysis of the Regionality of the Number of Tweets Related to the 2011 Fukushima Nuclear Power Station Disaster: Content Analysis	JMIR Public Health and Surveillance
20	Arnhold et al	2014	Mobile Applications for Diabetics: A Systematic Review and Expert-Based Usability Evaluation Considering the Special Requirements of Diabetes Patients Age 50 Years or Older	Journal of Medical Internet Research
21	Aslam et al.	2014	The reliability of tweets as a supplementary method of seasonal influenza surveillance.	Journal of Medical Internet Research
22	Athilingam & Jenkins	2018	Mobile Phone Apps to Support Heart Failure Self-Care Management: Integrative Review	JMIR Cardio
23	Ayers et al.	2012	A novel evaluation of World No Tobacco day in Latin America.	Journal of Medical Internet Research
24	Ayers et al.	2016	Leveraging Big Data to Improve Health Awareness Campaigns: A Novel Evaluation of the Great American Smokeout.	JMIR Public Health and Surveillance
25	Balls-Berry et al	2018	Linking Podcasts With Social Media to Promote Community Health and Medical Research: Feasibility Study	JMIR Formative Research
26	Baltrusaitis et al.	2017	Determinants of Participants' Follow-Up and Characterization of Representativeness in Flu Near You, A Participatory Disease Surveillance System	JMIR Public Health and Surveillance
27	Ben-Sasson & Yom-Tov	2016	Online Concerns of Parents Suspecting Autism Spectrum Disorder in Their Child: Content Analysis of Signs and Automated Prediction of Risk	Journal of Medical Internet Research
28	Berlinberg et al.	2018	Monitoring Interest in Herpes Zoster Vaccination: Analysis of Google Search Data.	JMIR Public Health and Surveillance
29	Bernardo et al.	2013	Scoping Review on Search Queries and Social Media for Disease Surveillance: A Chronology of Innovation	Journal of Medical Internet Research
30	Berry et al	2017	#WhyWeTweetMH: Understanding Why People Use Twitter to Discuss Mental Health Problems	Journal of Medical Internet Research
31	Bian et al.	2017	Using Social Media Data to Understand the Impact of Promotional Information on Laypeople's Discussions: A Case Study of Lynch Syndrome	Journal of Medical Internet Research
32	Birnbaum et al.	2017	A Collaborative Approach to Identifying Social Media Markers of Schizophrenia by Employing Machine Learning and Clinical Appraisals	Journal of Medical Internet Research
33	Bollegala et al.	2018	Causality Patterns for Detecting Adverse Drug Reactions From Social Media: Text Mining Approach	JMIR Public Health and Surveillance

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34	Bousquet et al.	2017	The Adverse Drug Reactions from Patient Reports in Social Media Project: Five Major Challenges to Overcome to Operationalize Analysis and Efficiently Support Pharmacovigilance Process	JMIR Research Protocols
35	Bragazzi	2013	A Google Trends-based approach for monitoring NSSI.	Psychology Research and Behavior Management
36	Bragazzi	2013	Infodemiology and infoveillance of multiple sclerosis in Italy.	Multiple Sclerosis International
37	Bragazzi et al.	2016	Infodemiology of status epilepticus: A systematic validation of the Google Trends-based search queries.	Epilepsy and Behavior
38	Bragazzi et al.	2016	Infodemiological data of West-Nile virus disease in Italy in the study period 2004-2015.	Data in Brief
39	Bragazzi et al.	2016	Infodemiological data concerning silicosis in the USA in the period 2004-2010 correlating with real-world statistical data.	Data in Brief
40	Braithwaite et al.	2016	Validating Machine Learning Algorithms for Twitter Data Against Established Measures of Suicidality	JMIR Mental Health
41	Brigo & Erro	2016	Why do people google movement disorders? An infodemiological study of information seeking behaviors.	Neurological Sciences
42	Brigo & Trinka	2015	Google search behavior for status epilepticus.	Epilepsy and Behavior
43	Brigo et al.	2015	Terminology of psychogenic nonepileptic seizures.	Epilepsia
44	Brigo et al.	2014	Why do people Google epilepsy? An infodemiological study of online behavior for epilepsy-related search terms.	Epilepsy and Behavior
45	Brigo et al.	2015	Wikipedia and neurological disorders.	Journal of Clinical Neuroscience
46	Brigo et al.	2018	Why do people search Wikipedia for information on multiple sclerosis?	Multiple Sclerosis and Related Disorders
47	Brigo et al.	2018	Italian Wikipedia and epilepsy: An infodemiological study of online information-seeking behavior.	Epilepsy and Behavior
48	Brigo et al.	2014	Web search behavior for multiple sclerosis: An infodemiological study.	Multiple Sclerosis and Related Disorders
49	Brigo et al.	2015	Information-seeking behaviour for epilepsy: an infodemiological study of searches for Wikipedia articles.	Epileptic Disorders
50	Brigo et al.	2016	Cancer information disparities on the internet: An infodemiological study	Journal of Cancer Policy
51	Broniatowski et al.	2015	Using Social Media to Perform Local Influenza Surveillance in an Inner-City Hospital: A Retrospective Observational Study	JMIR Public Health and Surveillance
52	Bubbenzer	2009	Infodemiologie am beispiel influenza: Die neuen chancen des Internets [Infodemiologie am beispiel influenza: Die neuen chancen des Internets]	Klinikarzt
53	Burton et al.	2012	"Right time, right place" health communication on Twitter: value and accuracy of location information.	Journal of Medical Internet Research
54	Callahan et al.	2015	Analyzing Information Seeking and Drug-Safety Alert Response by Health Care Professionals as New Methods for Surveillance	Journal of Medical Internet Research
55	Carrotte et al.	2017	"Fitspiration" on Social Media: A Content Analysis of Gendered Images	Journal of Medical Internet Research
56	Cartwright et al.	2018	Identifying National Availability of Abortion Care and Distance From Major US Cities: Systematic Online Search	Journal of Medical Internet Research
57	Cavazos-Regh et al.	2014	Characterizing the Followers and Tweets of a Marijuana-Focused Twitter Handle	Journal of Medical Internet Research
58	Cawkwell et al.	2015	Tracking Hookah Bars in New York: Utilizing Yelp as a Powerful Public Health Tool	JMIR Public Health and Surveillance
59	Chan et al.	2013	Infodemiology of alcohol use in Hong Kong mentioned on blogs: infoveillance study.	Journal of Medical Internet Research
60	Chen & Dredze	2018	Vaccine Images on Twitter: Analysis of What Images are Shared	Journal of Medical Internet Research
61	Chen et al. []	2018	Nature and Diffusion of Gynecologic Cancer-Related Misinformation on Social Media: Analysis of Tweets	Journal of Medical Internet Research
62	Chen et al.	2018	Does Eating Chicken Feet With Pickled Peppers Cause Avian Influenza? Observational Case Study on Chinese Social Media During the Avian Influenza A (H7N9) Outbreak.	JMIR Public Health and Surveillance
63	Chen et al.	2018	Dynamics of Health Agency Response and Public Engagement in Public Health Emergency: A Case Study of CDC Tweeting Patterns During the 2016 Zika Epidemic.	JMIR Public Health and Surveillance
64	Chen et al.	2015	What Online Communities Can Tell Us About Electronic Cigarettes and Hookah Use: A Study Using Text Mining and Visualization Techniques	Journal of Medical Internet Research
65	Cheng et al.	2017	Assessing Suicide Risk and Emotional Distress in Chinese Social Media: A Text Mining and Machine Learning Study	Journal of Medical Internet Research
66	Cheng et al.	2018	Analyzing Twitter as a Platform for Alzheimer-Related Dementia Awareness: Thematic Analyses of Tweets	JMIR Aging
67	Cherian et al.	2018	Representations of Codeine Misuse on Instagram: Content Analysis	JMIR Public Health and Surveillance
68	Chew & Eysenbach	2010	Pandemics in the age of Twitter: content analysis of Tweets during the 2009 H1N1 outbreak.	PLoS One
69	Chomutare et al.	2011	Features of Mobile Diabetes Applications: Review of the Literature and Analysis of Current Applications Compared Against Evidence-Based Guidelines	Journal of Medical Internet Research
70	Christmann et al.	2017	Stress Management Apps With Regard to Emotion-Focused Coping and Behavior Change Techniques: A Content Analysis	JMIR MHEALTH AND UHEALTH
71	Chu et al.	2015	Electronic Cigarette Marketing Online: a Multi-Site, Multi-Product Comparison	JMIR Public Health and Surveillance
72	Clyne et al.	2018	Using Social Media to Generate and Collect Primary Data: The #ShowsWorkplaceCompassion Twitter Research Campaign	JMIR Public Health and Surveillance
73	Colditz et al.	2018	Toward Real-Time Infoveillance of Twitter Health Messages.	Americal Journal of Public Health
74	Cole-Lewis et al.	2015	Social Listening: A Content Analysis of E-Cigarette Discussions on Twitter	Journal of Medical Internet Research

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75	Cole-Lewis et al.	2015	Assessing Electronic Cigarette-Related Tweets for Sentiment and Content Using Supervised Machine Learning	Journal of Medical Internet Research
76	Conway	2014	Ethical Issues in Using Twitter for Public Health Surveillance and Research: Developing a Taxonomy of Ethical Concepts From the Research Literature	Journal of Medical Internet Research
77	Cortés et al.	2017	Twitter for marijuana infodemiology	IEEE
78	Daniulaityte et al.	2016	"When 'Bad' is 'Good'": Identifying Personal Communication and Sentiment in Drug-Related Tweets	JMIR Public Health and Surveillance
79	Davis et al.	2017	Public Response to Obamacare on Twitter	Journal of Medical Internet Research
80	de Viron et al.	2013	Communicating Genetics and Smoking Through Social Media: Are We There Yet?	Journal of Medical Internet Research
81	Dejohn et al.	2018	Identifying and Understanding Communities Using Twitter to Connect About Depression: Cross-Sectional Study	JMIR Mental Health
82	Delaney et al.	2014	Using a Geolocation Social Networking Application to Calculate the Population Density of Sex-Seeking Gay Men for Research and Prevention Services	Journal of Medical Internet Research
83	Delir Haghighi et al.	2017	Investigating Subjective Experience and the Influence of Weather Among Individuals With Fibromyalgia: A Content Analysis of Twitter.	JMIR Public Health and Surveillance
84	Doan et al.	2017	How Do You #relax When You're #stressed? A Content Analysis and Infodemiology Study of Stress-Related Tweets.	JMIR Public Health and Surveillance
85	Domnich et al.	2014	Demand-based web surveillance of sexually transmitted infections in Russia	International Journal of Public Health
86	Du et al.	2016	Gordie Howe's "Miraculous Treatment": Case Study of Twitter Users' Reactions to a Sport Celebrity's Stem Cell Treatment.	JMIR Public Health and Surveillance
87	Du et al.	2018	Public Perception Analysis of Tweets During the 2015 Measles Outbreak: Comparative Study Using Convolutional Neural Network Models	Journal of Medical Internet Research
88	Duke et al.	2014	The Use of Social Media by State Tobacco Control Programs to Promote Smoking Cessation: A Cross-Sectional Study	Journal of Medical Internet Research
89	Dunn et al.	2015	Associations Between Exposure to and Expression of Negative Opinions About Human Papillomavirus Vaccines on Social Media: An Observational Study	Journal of Medical Internet Research
90	Dyson et al.	2017	Social Media for the Dissemination of Cochrane Child Health Evidence: Evaluation Study	Journal of Medical Internet Research
91	Edney et al.	2018	Creating Engaging Health Promotion Campaigns on Social Media: Observations and Lessons From Fitbit and Garmin	Journal of Medical Internet Research
92	Eklund	2012	Tracking changes in search behaviour at a health web site	Studies in Health Technology and Informatics
93	Espina & Estuar	2017	Infodemiology for Syndromic Surveillance of Dengue and Typhoid Fever in the Philippines	Procedia Computer Science
94	Espina et al.	2016	Towards an Infodemiological Algorithm for Classification of Filipino Health Tweets	Procedia Computer Science
95	Eysenbach	2011	Infodemiology and infoveillance tracking online health information and cyberbehavior for public health.	American Journal of Preventive Medicine
96	Eysenbach	2009	Infodemiology and infoveillance: framework for an emerging set of public health informatics methods to analyze search, communication and publication behavior on the Internet.	Journal of Medical Internet Research
97	Farhadloo et al.	2018	Associations of Topics of Discussion on Twitter With Survey Measures of Attitudes, Knowledge, and Behaviors Related to Zika: Probabilistic Study in the United States	JMIR Public Health and Surveillance
98	Foroughi et al.	2016	Googling" for Cancer: An Infodemiological Assessment of Online Search Interests in Australia, Canada, New Zealand, the United Kingdom, and the United States.	JMIR Cancer
99	Gabarron et al. []	2014	Tweet Content Related to Sexually Transmitted Diseases: No Joking Matter	Journal of Medical Internet Research
100	Gabarron et al.	2015	Is There a Weekly Pattern for Health Searches on Wikipedia and Is the Pattern Unique to Health Topics?	Journal of Medical Internet Research
101	García-Díaz et al.	2018	Opinion mining for measuring the social perception of infectious diseases. an infodemiology approach	Communications in Computer and Information Science
102	Gayle et al.	2017	Public Response to Scientific Misconduct: Assessing Changes in Public Sentiment Toward the Stimulus-Triggered Acquisition of Pluripotency (STAP) Cell Case via Twitter	JMIR Public Health and Surveillance
103	Genes et al.	2017	Analysis of Twitter Users' Sharing of Official New York Storm Response Messages	Medicine 2.0
104	Gianfredi et al.	2018	Monitoring public interest toward pertussis outbreaks: an extensive Google Trends-based analysis.	Public Health
105	Gianfredi et al.	2018	Harnessing Big Data for Communicable Tropical and Sub-Tropical Disorders: Implications From a Systematic Review of the Literature.	Frontiers in Public Health
106	Giat & Yom-Tov	2018	Evidence From Web-Based Dietary Search Patterns to the Role of B12 Deficiency in Non-Specific Chronic Pain: A Large-Scale Observational Study	Journal of Medical Internet Research
107	Gittelman et al.	2015	A New Source of Data for Public Health Surveillance: Facebook Likes	Journal of Medical Internet Research
108	Gohil et al.	2018	Sentiment Analysis of Health Care Tweets: Review of the Methods Used	JMIR Public Health and Surveillance
109	Gough et al.	2017	Tweet for Behavior Change: Using Social Media for the Dissemination of Public Health Messages	JMIR Public Health and Surveillance
110	Grajales et al.	2014	Social Media: A Review and Tutorial of Applications in Medicine and Health Care	Journal of Medical Internet Research
111	Greaves et al.	2013	Use of Sentiment Analysis for Capturing Patient Experience From Free-Text Comments Posted Online	Journal of Medical Internet Research
112	Griffis et al.	2014	Use of Social Media Across US Hospitals: Descriptive Analysis of Adoption and Utilization	Journal of Medical Internet Research
113	Gruzd & Haythornthwaite	2013	Enabling Community Through Social Media	Journal of Medical Internet Research
114	Gu et al.	2014	Importance of Internet Surveillance in Public Health Emergency Control and Prevention: Evidence From a Digital Epidemiologic Study During Avian Influenza A H7N9 Outbreaks	Journal of Medical Internet Research

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115	Guy et al.	2012	Social media: A systematic review to understand the evidence and application in infodemiology	Lecture Notes of the Institute for Computer Sciences
116	Hamad et al.	2016	Toward a Mixed-Methods Research Approach to Content Analysis in The Digital Age: The Combined Content-Analysis Model and its Applications to Health Care Twitter Feeds.	Journal of Medical Internet Research
117	Hammer	2017	Ethical Considerations When Using Social Media for Research.	Oncology Nursung Forum
118	Hand et al.	2016	Assessing the Viability of Social Media for Disseminating Evidence-Based Nutrition Practice Guideline Through Content Analysis of Twitter Messages and Health Professional Interviews: An Observational Study	Journal of Medical Internet Research
119	Hanson et al.	2013	Tweaking and Tweeting: Exploring Twitter for Nonmedical Use of a Psychostimulant Drug (Adderall) Among College Students	Journal of Medical Internet Research
120	Hanson et al.	2013	An Exploration of Social Circles and Prescription Drug Abuse Through Twitter	Journal of Medical Internet Research
121	Harris et al. []	2014	Are Public Health Organizations Tweeting to the Choir? Understanding Local Health Department Twitter Followership	Journal of Medical Internet Research
122	Harris et al.	2014	Tweeting for and Against Public Health Policy: Response to the Chicago Department of Public Health's Electronic Cigarette Twitter Campaign	Journal of Medical Internet Research
123	Hébert et al.	2017	Online Dissemination Strategies of a Canada Research Chair: Overview and Lessons Learned	JMIR Research Protocols
124	Hendriks et al.	2018	Social Drinking on Social Media: Content Analysis of the Social Aspects of Alcohol-Related Posts on Facebook and Instagram	Journal of Medical Internet Research
125	Hill et al.	2011	Natural supplements for H1N1 influenza: retrospective observational infodemiology study of information and search activity on the Internet.	Journal of Medical Internet Research
126	Hingle et al.	2013	Collection and Visualization of Dietary Behavior and Reasons for Eating Using Twitter	Journal of Medical Internet Research
127	Hswen et al.	2018	Monitoring Online Discussions About Suicide Among Twitter Users With Schizophrenia: Exploratory Study	JMIR Mental Health
128	Huang et al.	2018	Public Opinions Toward Diseases: Infodemiological Study on News Media Data	Journal of Medical Internet Research
129	Huesch et al.	2017	Frequencies of Private Mentions and Sharing of Mammography and Breast Cancer Terms on Facebook: A Pilot Study	Journal of Medical Internet Research
130	Jankowski & Hoffmann	2016	Can Google Searches Predict the Popularity and Harm of Psychoactive Agents?	Journal of Medical Internet Research
131	Jones et al.	2018	Novel Approach to Cluster Patient-Generated Data Into Actionable Topics: Case Study of a Web-Based Breast Cancer Forum.	JMIR Medical Informatics
132	Jung et al.	2015	Identifying Key Hospital Service Quality Factors in Online Health Communities	Journal of Medical Internet Research
133	Jung et al.	2017	Ontology-Based Approach to Social Data Sentiment Analysis: Detection of Adolescent Depression Signals	Journal of Medical Internet Research
134	Kadry et al.	2011	Analysis of 4999 Online Physician Ratings Indicates That Most Patients Give Physicians a Favorable Rating	Journal of Medical Internet Research
135	Kagashe et al.	2017	Enhancing Seasonal Influenza Surveillance: Topic Analysis of Widely Used Medicinal Drugs Using Twitter Data	Journal of Medical Internet Research
136	Kalf et al.	2018	Use of Social Media in the Assessment of Relative Effectiveness: Explorative Review With Examples From Oncology	JMIR Cancer
137	Kandadai et al.	2016	Measuring Health Information Dissemination and Identifying Target Interest Communities on Twitter: Methods Development and Case Study of the @SafetyMD Network	JMIR Research Protocols
138	Kandula et al.	2017	Subregional Nowcasts of Seasonal Influenza Using Search Trends.	Journal of Medical Internet Research
139	Katsuki et al.	2015	Establishing a Link Between Prescription Drug Abuse and Illicit Online Pharmacies: Analysis of Twitter Data.	Journal of Medical Internet Research
140	Keller et al.	2018	Reproductive Health and Medication Concerns for Patients With Inflammatory Bowel Disease: Thematic and Quantitative Analysis Using Social Listening.	Journal of Medical Internet Research
141	Keller et al.	2017	Public Perceptions Regarding Use of Virtual Reality in Health Care: A Social Media Content Analysis Using Facebook	Journal of Medical Internet Research
142	Kendra et al.	2015	Characterizing the Discussion of Antibiotics in the Twittersphere: What is the Bigger Picture?	Journal of Medical Internet Research
143	Khan et al.	2012	A robust and scalable framework for detecting self-reported illness from twitter	IEEE
144	Khoury et al.	2012	Knowledge integration at the center of genomic medicine.	Genetics in Medicine
145	Kim et al.	2015	Using Twitter Data to Gain Insights into E-cigarette Marketing and Locations of Use: An Infoveillance Study.	Journal of Medical Internet Research
146	Kim et al.	2014	Investigating the congruence of crowdsourced information with official government data: the case of pediatric clinics.	Journal of Medical Internet Research
147	Kim et al.	2017	Scaling Up Research on Drug Abuse and Addiction Through Social Media Big Data.	Journal of Medical Internet Research
148	Kim et al.	2016	Garbage in, Garbage Out: Data Collection, Quality Assessment and Reporting Standards for Social Media Data Use in Health Research, Infodemiology and Digital Disease Detection.	Journal of Medical Internet Research
149	Kim et al.	2017	Classification of Twitter Users Who Tweet About E-Cigarettes	JMIR Public Health and Surveillance
150	Klembczyk et al.	2016	Google Flu Trends Spatial Variability Validated Against Emergency Department Influenza-Related Visits.	Journal of Medical Internet Research
151	Koh et al.	2014	Stroke Experiences in Weblogs: A Feasibility Study of Sex Differences	Journal of Medical Internet Research
152	Konheim-Kalkstein et al.	2018	How Women Evaluate Birth Challenges: Analysis of Web-Based Birth Stories	JMIR Pediatrics and Parenting
153	Koschack et al.	2015	Scientific Versus Experiential Evidence: Discourse Analysis of the Chronic Cerebrospinal Venous Insufficiency Debate in a Multiple Sclerosis Forum	Journal of Medical Internet Research

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154	Kostkova et al.	2013	Major Infection Events Over 5 Years: How Is Media Coverage Influencing Online Information Needs of Health Care Professionals and the Public?	Journal of Medical Internet Research
155	Krueger & Young	2015	Twitter: A Novel Tool for Studying the Health and Social Needs of Transgender Communities	JMIR Mental Health
156	Kurzinger et al.	2018	Web-Based Signal Detection Using Medical Forums Data in France: Comparative Analysis	Journal of Medical Internet Research
157	Lachmar et al.	2017	#MyDepressionLooksLike: Examining Public Discourse About Depression on Twitter	JMIR Mental Health
158	Lama et al.	2018	Discordance Between Human Papillomavirus Twitter Images and Disparities in Human Papillomavirus Risk and Disease in the United States: Mixed-Methods Analysis	Journal of Medical Internet Research
159	Lardon et al.	2015	Adverse Drug Reaction Identification and Extraction in Social Media: A Scoping Review	Journal of Medical Internet Research
160	Lau et al.	2011	The role of social media for patients and consumer health. Contribution of the IMIA Consumer Health Informatics Working Group.	Yearbook of Medical Informatics
161	Lavorgna et al.	2018	e-Health and multiple sclerosis: An update.	Multiple Sclerosis
162	Lazard et al.	2016	E-Cigarette Social Media Messages: A Text Mining Analysis of Marketing and Consumer Conversations on Twitter	JMIR Public Health and Surveillance
163	Leal Neto et al.	2017	Saúde na Copa: The World's First Application of Participatory Surveillance for a Mass Gathering at FIFA World Cup 2014, Brazil	JMIR Public Health and Surveillance
164	Lee et al.	2014	What Are Health-Related Users Tweeting? A Qualitative Content Analysis of Health-Related Users and Their Messages on Twitter	Journal of Medical Internet Research
165	Lee et al.	2016	Examining the Relationship Between Past Orientation and US Suicide Rates: An Analysis Using Big Data-Driven Google Search Queries	Journal of Medical Internet Research
166	Lenoir et al.	2017	Raising Awareness About Cervical Cancer Using Twitter: Content Analysis of the 2015 #SmearForSmear Campaign	Journal of Medical Internet Research
167	Leung et al.	2018	Social Media Users' Perception of Telemedicine and mHealth in China: Exploratory Study	JMIR mHealth and uHealth
168	Li et al.	2018	Understanding Users' Vaping Experiences from Social Media: Initial Study Using Sentiment Opinion Summarization Techniques.	Journal of Medical Internet Research
169	Liang & Scammon	2013	Incidence of Online Health Information Search: A Useful Proxy for Public Health Risk Perception	Journal of Medical Internet Research
170	Lienemann et al.	2017	Methods for Coding Tobacco-Related Twitter Data: A Systematic Review	Journal of Medical Internet Research
171	Ling & Lee	2016	Disease Monitoring and Health Campaign Evaluation Using Google Search Activities for HIV and AIDS, Stroke, Colorectal Cancer, and Marijuana Use in Canada: A Retrospective Observational Study.	JMIR Public Health and Surveillance
172	Liu et al.	2011	The quality and characteristics of leading general hospitals' websites in China.	Journal of Medical Systems
173	Liu et al.	2016	Use of Social Media in the Diabetes Community: An Exploratory Analysis of Diabetes-Related Tweets	JMIR Diabetes
174	Liu et al.	2017	Identifying Potential Norovirus Epidemics in China via Internet Surveillance	Journal of Medical Internet Research
175	Liu et al.	2017	Using Real-Time Social Media Technologies to Monitor Levels of Perceived Stress and Emotional State in College Students: A Web-Based Questionnaire Study	JMIR Mental Health
176	Liu et al.	2018	Monitoring Freshman College Experience Through Content Analysis of Tweets: Observational Study	JMIR Public Health and Surveillance
177	Livelo & Cheng	2018	Intelligent dengue infoveillance using gated recurrent neural learning and cross-label frequencies	IEEE International Conference on Agents
178	Lu et al.	2018	Accurate Influenza Monitoring and Forecasting Using Novel Internet Data Streams: A Case Study in the Boston Metropolis	JMIR Public Health and Surveillance
179	Lyles et al.	2016	Applying Sparse Machine Learning Methods to Twitter: Analysis of the 2012 Change in Pap Smear Guidelines. A Sequential Mixed-Methods Study	JMIR Public Health and Surveillance
180	Mackey & Liang	2013	Global Reach of Direct-to-Consumer Advertising Using Social Media for Illicit Online Drug Sales	Journal of Medical Internet Research
181	Mackey et al.	2018	Solution to Detect, Classify, and Report Illicit Online Marketing and Sales of Controlled Substances via Twitter: Using Machine Learning and Web Forensics to Combat Digital Opioid Access	Journal of Medical Internet Research
182	Madden et al.	2017	The Seasonal Periodicity of Healthy Contemplations About Exercise and Weight Loss: Ecological Correlational Study	JMIR Public Health and Surveillance
183	Mahoney et al.	2015	The Digital Distribution of Public Health News Surrounding the Human Papillomavirus Vaccination: A Longitudinal Infodemiology Study.	JMIR Public Health and Surveillance
184	Mahroum et al.	2018	An infodemiological investigation of the so-called "Fluad effect" during the 2014/2015 influenza vaccination campaign in Italy: Ethical and historical implications.	Human Vaccines and Immunotherapeutics
185	Majumder et al.	2016	Utilizing Nontraditional Data Sources for Near Real-Time Estimation of Transmission Dynamics During the 2015-2016 Colombian Zika Virus Disease Outbreak	JMIR Public Health and Surveillance
186	Manchaiah et al.	2018	Representation of Tinnitus in the US Newspaper Media and in Facebook Pages: Cross-Sectional Analysis of Secondary Data	Interactive Journal of Medical Research
187	Mao et al.	2014	An Internet-Based Epidemiological Investigation of the Outbreak of H7N9 Avian Influenza A in China Since Early 2013	Journal of Medical Internet Research
188	Marcon et al.	2016	Chiropractic and Spinal Manipulation Therapy on Twitter: Case Study Examining the Presence of Critiques and Debates.	JMIR Public Health and Surveillance
189	Marcus et al.	2012	What Are Young Adults Saying About Mental Health? An Analysis of Internet Blogs	Journal of Medical Internet Research
190	Martinez et al.	2017	iOS Appstore-Based Phone Apps for Diabetes Management: Potential for Use in Medication Adherence	JMIR Diabetes
191	Martinez-Arroyo et al.	2018	Potential uses of an infodemiology approach for health-care services for rheumatology.	Clinical Rheumatology
192	Martinez-Millana et al	2017	Evaluating the Social Media Performance of Hospitals in Spain: A Longitudinal and Comparative Study	Journal of Medical Internet Research
193	Martins-Filho et al.	2018	Femicide trends in Brazil: relationship between public interest and mortality rates.	Archives of Womens Mental Health

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194	Massey et al.	2016	Applying Multiple Data Collection Tools to Quantify Human Papillomavirus Vaccine Communication on Twitter	Journal of Medical Internet Research
195	Matsuda et al.	2017	Analysis of Patient Narratives in Disease Blogs on the Internet: An Exploratory Study of Social Pharmacovigilance	JMIR Public Health and Surveillance
196	Mavragani & Ochoa	2018	Forecasting AIDS prevalence in the United States using online search traffic data	Journal of Big Data
197	Mavragani & Ochoa	2018	Infoveillance of infectious diseases in USA: STDs, tuberculosis, and hepatitis	Journal of Big Data
198	Mavragani et al.	2018	Assessing the Methods, Tools, and Statistical Approaches in Google Trends Research: Systematic Review.	Journal of Medical Internet Research
199	Mavragani et al.	2018	Integrating Smart Health in the US Health Care System: Infodemiology Study of Asthma Monitoring in the Google Era.	JMIR Public Health and Surveillance
200	Mazzocut et al.	2016	Web Conversations About Complementary and Alternative Medicines and Cancer: Content and Sentiment Analysis	Journal of Medical Internet Research
201	McNaughton et al.	2014	Monitoring of Internet Forums to Evaluate Reactions to the Introduction of Reformulated OxyContin to Deter Abuse	Journal of Medical Internet Research
202	Meaney et al.	2016	Reaction on Twitter to a Cluster of Perinatal Deaths: A Mixed Method Study.	JMIR Public Health and Surveillance
203	Mejova et al.	2018	Online Health Monitoring using Facebook Advertisement Audience Estimates in the United States: Evaluation Study.	JMIR Public Health and Surveillance
204	Melver et al.	2015	Characterizing Sleep Issues Using Twitter	Journal of Medical Internet Research
205	Menachemi et al.	2017	Using Web-Based Search Data to Study the Public's Reactions to Societal Events: The Case of the Sandy Hook Shooting.	JMIR Public Health and Surveillance
206	Mendiola et al.	2015	Valuable Features in Mobile Health Apps for Patients and Consumers: Content Analysis of Apps and User Ratings	JMIR mHealth and uHealth
207	Metwally et al.	2017	Using Social Media to Characterize Public Sentiment Toward Medical Interventions Commonly Used for Cancer Screening: An Observational Study	Journal of Medical Internet Research
208	Miller et al.	2017	What Are People Tweeting About Zika? An Exploratory Study Concerning Its Symptoms, Treatment, Transmission, and Prevention	JMIR Public Health and Surveillance
209	Mishori et al.	2014	Mapping physician Twitter networks: describing how they work as a first step in understanding connectivity, information flow, and message diffusion.	Journal of Medical Internet Research
210	Mnadla et al.	2016	Infodemiological data of Ironman Triathlon in the study period 2004-2013.	Data in Brief
211	Moccia et al.	2018	Neurology and the Internet: a review.	Neurological Sciences
212	Mollema et al.	2015	Disease Detection or Public Opinion Reflection? Content Analysis of Tweets, Other Social Media, and Online Newspapers During the Measles Outbreak in the Netherlands in 2013	Journal of Medical Internet Research
213	Mowery et al.	2017	Understanding Depressive Symptoms and Psychosocial Stressors on Twitter: A Corpus-Based Study	Journal of Medical Internet Research
214	Mukhija et al.	2017	Effectivity of Awareness Months in Increasing Internet Search Activity for Top Malignancies Among Women.	JMIR Public Health and Surveillance
215	Muralidhara & Paul	2018	#Healthy Selfies: Exploration of Health Topics on Instagram	JMIR Public Health and Surveillance
216	Myslin et al.	2013	Using Twitter to Examine Smoking Behavior and Perceptions of Emerging Tobacco Products	Journal of Medical Internet Research
217	Nagar et al.	2014	A case study of the New York City 2012-2013 influenza season with daily geocoded Twitter data from temporal and spatiotemporal perspectives.	Journal of Medical Internet Research
218	Nagel et al.	2013	The complex relationship of realspace events and messages in cyberspace: case study of influenza and pertussis using tweets.	Journal of Medical Internet Research
219	Nakada et al.	2014	Development of a national agreement on human papillomavirus vaccination in Japan: an infodemiology study.	Journal of Medical Internet Research
220	Nakhasi et al.	2014	Online Social Networks That Connect Users to Physical Activity Partners: A Review and Descriptive Analysis	Journal of Medical Internet Research
221	Nascimento et al.	2014	Real-time sharing and expression of migraine headache suffering on Twitter: a cross-sectional infodemiology study.	Journal of Medical Internet Research
222	Nguyen et al.	2016	Building a National Neighborhood Dataset From Geotagged Twitter Data for Indicators of Happiness, Diet, and Physical Activity	JMIR Public Health and Surveillance
223	Nishimoto et al.	2016	Estimating the Duration of Public Concern After the Fukushima Dai-ichi Nuclear Power Station Accident From the Occurrence of Radiation Exposure-Related Terms on Twitter: A Retrospective Data Analysis.	JMIR Public Health and Surveillance
224	Noll-Hussong	2017	Whiplash Syndrome Reloaded: Digital Echoes of Whiplash Syndrome in the European Internet Search Engine Context.	JMIR Public Health and Surveillance
225	Nsoesie et al.	2014	Guess Who's Not Coming to Dinner? Evaluating Online Restaurant Reservations for Disease Surveillance	Journal of Medical Internet Research
226	Odlum et al.	2018	How Twitter Can Support the HIV/AIDS Response to Achieve the 2030 Eradication Goal: In-Depth Thematic Analysis of World AIDS Day Tweets.	JMIR Public Health and Surveillance
227	Oldroyd et al.	2018	Identifying Methods for Monitoring Foodborne Illness: Review of Existing Public Health Surveillance Techniques.	JMIR Public Health and Surveillance
228	Oser et al.	2017	A Novel Approach to Identifying Barriers and Facilitators in Raising a Child With Type 1 Diabetes: Qualitative Analysis of Caregiver Blogs	JMIR Diabetes
229	Ozan-Rafferty	2014	In the Words of the Medical Tourist: An Analysis of Internet Narratives by Health Travelers to Turkey	Journal of Medical Internet Research
230	Pan et al.	2018	The Significance of Witness Sensors for Mass Casualty Incidents and Epidemic Outbreaks	Journal of Medical Internet Research
231	Park & Hong	2018	Identification of Primary Medication Concerns Regarding Thyroid Hormone Replacement Therapy From Online Patient Medication Reviews: Text Mining of Social Network Data	Journal of Medical Internet Research
232	Peiper et al.	2017	Patterns of Twitter Behavior Among Networks of Cannabis Dispensaries in California	Journal of Medical Internet Research

	Authors	Year	Title	Journal
233	Pervaiz et al.	2012	FluBreaks: Early Epidemic Detection from Google Flu Trends	Journal of Medical Internet Research
234	Pesala et al.	2017	Health Information-Seeking Patterns of the General Public and Indications for Disease Surveillance: Register-Based Study Using Lyme Disease.	JMIR Public Health and Surveillance
235	Pesala et al.	2017	Health Care Professionals' Evidence-Based Medicine Internet Searches Closely Mimic the Known Seasonal Variation of Lyme Borreliosis: A Register-Based Study	JMIR Public Health and Surveillance
236	Phillips et al.	2018	Relationship Between State-Level Google Online Search Volume and Cancer Incidence in the United States: Retrospective Study.	Journal of Medical Internet Research
237	Poirier et al.	2018	Real Time Influenza Monitoring Using Hospital Big Data in Combination with Machine Learning Methods: Comparison Study.	JMIR Public Health and Surveillance
238	Pretorius et al.	2018	Sudden Infant Death Syndrome and Safe Sleep on Twitter: Analysis of Influences and Themes to Guide Health Promotion Efforts	JMIR Pediatrics and Parenting
239	Priest et al.	2016	Finding the Patient's Voice Using Big Data: Analysis of Users' Health-Related Concerns in the ChaCha Question-and-Answer Service (2009-2012).	Journal of Medical Internet Research
240	Rabarison et al.	2017	Measuring Audience Engagement for Public Health Twitter Chats: Insights From #LiveFitNOLA	JMIR Public Health and Surveillance
241	Radin & Sciascia	2017	Infodemiology of systemic lupus erythematosus using Google Trends.	Lupus
242	Radzikowski et al.	2016	The Measles Vaccination Narrative in Twitter: A Quantitative Analysis	JMIR Public Health and Surveillance
243	Ragestar-Mojarad et al.	2016	Using Social Media Data to Identify Potential Candidates for Drug Repurposing: A Feasibility Study	JMIR Research Protocols
244	Rastegar-Mojarad et al.	2015	Collecting and Analyzing Patient Experiences of Health Care From Social Media	JMIR Research Protocols
245	Ricard et al.	2018	Exploring the Utility of Community-Generated Social Media Content for Detecting Depression: An Analytical Study on Instagram	Journal of Medical Internet Research
246	Risson et al.	2016	Patterns of Treatment Switching in Multiple Sclerosis Therapies in US Patients Active on Social Media: Application of Social Media Content Analysis to Health Outcomes Research	Journal of Medical Internet Research
247	Roberts et al.	2015	Globalization of Continuing Professional Development by Journal Clubs via Microblogging: A Systematic Review	Journal of Medical Internet Research
248	Robillard et al.	2013	Utilizing Social Media to Study Information-Seeking and Ethical Issues in Gene Therapy	Journal of Medical Internet Research
249	Rocchetti et al.	2017	Attitudes of Crohn's Disease Patients: Infodemiology Case Study and Sentiment Analysis of Facebook and Twitter Posts.	JMIR Public Health and Surveillance
250	Rocheleau et al.	2015	An Observational Study of Social and Emotional Support in Smoking Cessation Twitter Accounts: Content Analysis of Tweets	Journal of Medical Internet Research
251	Rose et al.	2017	Perceptions of Menthol Cigarettes Among Twitter Users: Content and Sentiment Analysis	Journal of Medical Internet Research
252	Rosenblum & Yom-Tov	2017	Seeking Web-Based Information About Attention Deficit Hyperactivity Disorder: Where, What, and When	Journal of Medical Internet Research
253	Sadah et al.	2015	A Study of the Demographics of Web-Based Health-Related Social Media Users	Journal of Medical Internet Research
254	Sadah et al.	2016	Demographic-Based Content Analysis of Web-Based Health-Related Social Media	Journal of Medical Internet Research
255	Saha et al.	2017	Characterizing Awareness of Schizophrenia Among Facebook Users by Leveraging Facebook Advertisement Estimates	Journal of Medical Internet Research
256	Samaras et al.	2017	Syndromic Surveillance Models Using Web Data: The Case of Influenza in Greece and Italy Using Google Trends	JMIR Public Health and Surveillance
257	Santos & Matos	2014	Analysing Twitter and web queries for flu trend prediction.	Theoretical Biology and Medical Modelling
258	Sanz-Lorente et al.	2018	Web 2.0 Tools in the Prevention of Curable Sexually Transmitted Diseases: Scoping Review	Journal of Medical Internet Research
259	Sarker et al.	2017	Discovering Cohorts of Pregnant Women From Social Media for Safety Surveillance and Analysis	Journal of Medical Internet Research
260	Sato et al.	2015	Blog Posting After Lung Cancer Notification: Content Analysis of Blogs Written by Patients or Their Families	JMIR Cancer
261	Schlichthorst et al.	2018	Influencing the Conversation About Masculinity and Suicide: Evaluation of the Man Up Multimedia Campaign Using Twitter Data	JMIR Mental Health
262	Sciascia & Radin	2017	What can Google and Wikipedia can tell us about a disease? Big Data trends analysis in Systemic Lupus Erythematosus.	International Journal of Medical Informatics
263	Sciascia et al.	2018	Infodemiology of antiphospholipid syndrome: Merging informatics and epidemiology.	European Journal of Rheumatology
264	Seabrook et al.	2018	Predicting Depression From Language-Based Emotion Dynamics: Longitudinal Analysis of Facebook and Twitter Status Updates	Journal of Medical Internet Research
265	Seidl et al.	2018	What Do Germans Want to Know About Skin Cancer? A Nationwide Google Search Analysis From 2013 to 2017	Journal of Medical Internet Research
266	Sentana-Lledo et al.	2016	Seasons, Searches, and Intentions: What The Internet Can Tell Us About The Bed Bug (Hemiptera: Cimicidae) Epidemic.	Journal of Medical Entomology
267	Seo et al.	2014	Cumulative Query Method for Influenza Surveillance Using Search Engine Data	Journal of Medical Internet Research
268	Sewalk et al.	2018	Using Twitter to Examine Web-Based Patient Experience Sentiments in the United States: Longitudinal Study	Journal of Medical Internet Research
269	SeyyedHosseini et al.	2018	An infodemiology study on breast cancer in Iran: Health information supply versus health information demand in PubMed and Google Trends	Electronic Library
270	SeyyedHosseini et al.	2017	Infodemiology: A new presence concept in human information interaction based on eyensbach's view	Iranian Journal of Information Processing Management
271	SeyyedHosseini et al.	2017	Scientific publication behavior versus information seeking behavior: An infodemiological study on stomach cancer	Webology
272	Sharpe et al.	2016	Evaluating Google, Twitter, and Wikipedia as Tools for Influenza Surveillance Using Bayesian Change Point Analysis: A Comparative Analysis	Journal of Medical Internet Research

	Authors	Year	Title	Journal
273	Shi & Salmon	2018	Identifying Opinion Leaders to Promote Organ Donation on Social Media: Network Study	Journal of Medical Internet Research
274	Simpson et al.	2018	Detecting Novel and Emerging Drug Terms Using Natural Language Processing: A Social Media Corpus Study	Journal of Medical Internet Research
275	Sinha et al.	2018	Social Media Impact of the Food and Drug Administration's Drug Safety Communication Messaging About Zolpidem: Mixed-Methods Analysis	Journal of Medical Internet Research
276	Sinnenberg et al.	2018	Content Analysis of Metaphors About Hypertension and Diabetes on Twitter: Exploratory Mixed-Methods Study	JMIR Diabetes
277	Smith et al.	2017	Variations in Facebook Posting Patterns Across Validated Patient Health Conditions: A Prospective Cohort Study	Journal of Medical Internet Research
278	Spyropoulos et al.	2018	Uptake and Utilization of the Management of Anticoagulation in the Perioperative Period App: Longitudinal Analysis	JMIR mHealth and uHealth
279	Staal et al.	2018	New Tobacco and Tobacco-Related Products: Early Detection of Product Development, Marketing Strategies, and Consumer Interest.	JMIR Public Health and Surveillance
280	Stefanidis et al.	2017	Zika in Twitter: Temporal Variations of Locations, Actors, and Concepts	JMIR Public Health and Surveillance
281	Sudau et al.	2014	Sources of Information and Behavioral Patterns in Online Health Forums: Observational Study	Journal of Medical Internet Research
282	Sueki	2015	The association of suicide-related Twitter use with suicidal behaviour: a cross-sectional study of young internet users in Japan.	Journal of Affective Disorders
283	Sugawara et al.	2016	Medical Institutions and Twitter: A Novel Tool for Public Communication in Japan	JMIR Public Health and Surveillance
284	Sugawara et al.	2017	Scientific Misconduct and Social Media: Role of Twitter in the Stimulus Triggered Acquisition of Pluripotency Cells Scandal	Journal of Medical Internet Research
285	Surian et al.	2016	Characterizing Twitter Discussions About HPV Vaccines Using Topic Modeling and Community Detection	Journal of Medical Internet Research
286	Tafti et al.	2017	Adverse Drug Event Discovery Using Biomedical Literature: A Big Data Neural Network Adventure	JMIR Medical Informatics
287	Tana et al.	2018	Diurnal Variations of Depression-Related Health Information Seeking: Case Study in Finland Using Google Trends Data.	JMIR Mental Health
288	Tangherlini et al.	2016	"Mommy Blogs" and the Vaccination Exemption Narrative: Results From A Machine-Learning Approach for Story Aggregation on Parenting Social Media Sites	JMIR Public Health and Surveillance
289	Tapi Nzali et al.	2017	What Patients Can Tell Us: Topic Analysis for Social Media on Breast Cancer	JMIR Medical Informatics
290	Thackeray et al.	2013	Analysis of the Purpose of State Health Departments' Tweets: Information Sharing, Engagement, and Action	Journal of Medical Internet Research
291	Tighe et al.	2015	The Painful Tweet: Text, Sentiment, and Community Structure Analyses of Tweets Pertaining to Pain	Journal of Medical Internet Research
292	Timpka et al.	2014	Performance of eHealth Data Sources in Local Influenza Surveillance: A 5-Year Open Cohort Study	Journal of Medical Internet Research
293	Tinschert et al.	2017	The Potential of Mobile Apps for Improving Asthma Self-Management: A Review of Publicly Available and Well-Adopted Asthma Apps	JMIR mhealth and uHealth
294	Tougas et al.	2018	Social Media Content About Children's Pain and Sleep: Content and Network Analysis	JMIR Pediatrics and Parenting
295	Triemstra et al.	2018	Correlations Between Hospitals' Social Media Presence and Reputation Score and Ranking: Cross-Sectional Analysis	Journal of Medical Internet Research
296	Troullos et al.	2014	Common Cold Symptoms in Children: Results of an Internet-Based Surveillance Program	Journal of Medical Internet Research
297	Tsuya et al.	2014	Do Cancer Patients Tweet? Examining the Twitter Use of Cancer Patients in Japan	Journal of Medical Internet Research
298	Tufts et al.	2018	Characterizing Tweet Volume and Content About Common Health Conditions Across Pennsylvania: Retrospective Analysis	JMIR Public Health and Surveillance
299	Tyrawski & DeAndrea	2015	Pharmaceutical Companies and Their Drugs on Social Media: A Content Analysis of Drug Information on Popular Social Media Sites	Journal of Medical Internet Research
300	Utengen et al.	2017	Patient Participation at Health Care Conferences: Engaged Patients Increase Information Flow, Expand Propagation, and Deepen Engagement in the Conversation of Tweets Compared to Physicians or Researchers	Journal of Medical Internet Research
301	van Lent et al.	2017	Too Far to Care? Measuring Public Attention and Fear for Ebola Using Twitter	Journal of Medical Internet Research
302	Vasconcellos-Silva et al.	2017	Using Google Trends Data to Study Public Interest in Breast Cancer Screening in Brazil: Why Not a Pink February?	JMIR Public Health and Surveillance
303	Vickey & Breslin	2017	Online Influence and Sentiment of Fitness Tweets: Analysis of Two Million Fitness Tweets	JMIR Public Health and Surveillance
304	Wagner et al.	2017	Estimating the Population Impact of a New Pediatric Influenza Vaccination Program in England Using Social Media Content	Journal of Medical Internet Research
305	Wakamiya	2018	Twitter-Based Influenza Detection After Flu Peak via Tweets With Indirect Information: Text Mining Study.	JMIR Public Health and Surveillance
306	Wang & Chen	2018	Economic Recession and Obesity-Related Internet Search Behavior in Taiwan: Analysis of Google Trends Data.	JMIR Public Health and Surveillance
307	Wang et al.	2015	Forecasting the Incidence of Dementia and Dementia-Related Outpatient Visits With Google Trends: Evidence From Taiwan	Journal of Medical Internet Research
308	Weeg et al.	2015	Using Twitter to Measure Public Discussion of Diseases: A Case Study	JMIR Public Health and Surveillance
309	Williams et al.	2013	How Twitter Is Studied in the Medical Professions: A Classification of Twitter Papers Indexed in PubMed	MECIDINE 2.0
310	Winchester et al.	2017	Quality of Social Media and Web-Based Information Regarding Inappropriate Nuclear Cardiac Stress Testing and the Choosing Wisely Campaign: A Cross-Sectional Study	Interactive Journal of Medical Research
311	Wittmeier et al.	2014	Analysis of a Parent-Initiated Social Media Campaign for Hirschsprung's Disease	Journal of Medical Internet Research
312	Wong et al.	2013	Accessing Suicide-Related Information on the Internet: A Retrospective Observational Study of Search Behavior	Journal of Medical Internet Research

	Authors	Year	Title	Journal
313	Wong et al.	2015	Twitter Sentiment Predicts Affordable Care Act Marketplace Enrollment	Journal of Medical Internet Research
314	Wongkoblap et al.	2017	Researching Mental Health Disorders in the Era of Social Media: Systematic Review.	Journal of Medical Internet Research
315	Woo et al.	2016	Estimating Influenza Outbreaks Using Both Search Engine Query Data and Social Media Data in South Korea.	Journal of Medical Internet Research
316	Wood et al.	2018	Public Awareness of Uterine Power Morcellation Through US Food and Drug Administration Communications: Analysis of Google Trends Search Term Patterns	JMIR Public Health and Surveillance
317	Xu & Liu	2015	mHealthApps: A Repository and Database of Mobile Health Apps	JMIR mhealth and uHealth
318	Xu et al.	2018	Predicting Prediabetes Through Facebook Postings: Protocol for a Mixed-Methods Study.	JMIR Research Protocols
319	Xu et al.	2016	Leveraging Social Media to Promote Public Health Knowledge: Example of Cancer Awareness via Twitter	JMIR Public Health and Surveillance
320	Yagahara et al.	2018	Relationships Among Tweets Related to Radiation: Visualization Using Co-Occurring Networks	JMIR Public Health and Surveillance
321	Yang et al.	2017	Effects of the Ambient Fine Particulate Matter on Public Awareness of Lung Cancer Risk in China: Evidence from the Internet-Based Big Data Platform	JMIR Public Health and Surveillance
322	Yin et al.	2015	A Scalable Framework to Detect Personal Health Mentions on Twitter.	Journal of Medical Internet Research
323	Yom-Tov & Gabrilovich	2013	Postmarket drug surveillance without trial costs: discovery of adverse drug reactions through large-scale analysis of web search queries.	Journal of Medical Internet Research
324	Yom-Tov et al.	2014	Seeking Insights About Cycling Mood Disorders via Anonymized Search Logs	Journal of Medical Internet Research
325	Yom-Tov et al.	2015	Automatic Identification of Web-Based Risk Markers for Health Events	Journal of Medical Internet Research
326	Yom-Tov et al.	2014	Detecting disease outbreaks in mass gatherings using Internet data.	Journal of Medical Internet Research
327	Yom-Tov Lev-Ran	2017	Adverse Reactions Associated With Cannabis Consumption as Evident From Search Engine Queries	JMIR Public Health and Surveillance
328	Young	2018	Social Media as a New Vital Sign: Commentary	Journal of Medical Internet Research
329	Zeraatkar & Ahmadi	2018	Trends of infodemiology studies: a scoping review.	Health Information and Libraries Journal
330	Zhan et al.	2017	Identifying Topics for E-Cigarette User-Generated Contents: A Case Study From Multiple Social Media Platforms.	Journal of Medical Internet Research
331	Zhang et al.	2016	Tracking Dabbing Using Search Query Surveillance: A Case Study in the United States	Journal of Medical Internet Research
332	Zhang et al.	2018	Automated Identification of Hookahs (Waterpipes) on Instagram: An Application in Feature Extraction Using Convolutional Neural Network and Support Vector Machine Classification	Journal of Medical Internet Research
333	Zhang et al.	2014	Methodology of developing a smartphone application for crisis research and its clinical application.	Technology and Health Care
334	Zhang et al.	2013	Electronic word of mouth on twitter about physical activity in the United States: exploratory infodemiology study.	Journal of Medical Internet Research
335	Zhao & Yang	2018	Drug Repositioning to Accelerate Drug Development Using Social Media Data: Computational Study on Parkinson Disease	Journal of Medical Internet Research
336	Zheluk et al.	2012	Searching for Truth: Internet Search Patterns as a Method of Investigating Online Responses to a Russian Illicit Drug Policy Debate	Journal of Medical Internet Research
337	Zheluk et al.	2013	Internet search patterns of human immunodeficiency virus and the digital divide in the Russian Federation: infoveillance study.	Journal of Medical Internet Research
338	Zheluk et al.	2014	Internet search and krokodil in the Russian Federation: an infoveillance study.	Journal of Medical Internet Research

Table A2 consists of the complete list of the 338 examined publications categorized by data source employed, i.e. Google, Twitter, Facebook, Instagram, Wikipedia, Other Social Media, Blogs/Forums/Communities, Websites/Platforms, News Outlets/Media, Electronic Health Records/Databases/Call records/Online Surveys, Other Search Engines, Mobile Apps, and Reviews.

Table A2. List of publications by data source employed

Authors	Google	Twitter	Facebook	Instagram	Wikipedia	Other Social Media	Blogs/Forums/Communities	Websites/Platforms	News Outlets/Media	Electronic Health Records/Databases/Call records/Online Surveys	Other Search Engines	Online Survey	Mobile App	N/A	Review
1 Abbate et al., 2017													✓		
2 Abbe & Falissard, 2017							✓								
3 Abdellaoui et al., 2017							✓								
4 Abdellaoui et al., 2018							✓								
5 Adams, 2013								✓							
6 Adawi et al., 2017	✓														
7 Adrover et al., 2015		✓													
8 Adusumalli et al., 2015								✓							
9 Agarwal et al., 2016											✓				
10 Albalawi & Sixsmith, 2015		✓							✓						
11 Allem et al., 2017				✓											
12 Allem et al., 2018		✓													
13 Allem et al., 2017		✓													
14 Allem et al., 2017		✓													
15 Alnemer et al., 2015		✓													
16 Alvarez-Mon et al., 2018		✓													
17 Alvaro et al., 2017		✓						✓							
18 Anderson et al., 2017							✓								
19 Aoki et al., 2018		✓													
20 Arnhold et al													✓		
21 Aslam et al., 2014		✓													
22 Athilingam & Jenkins													✓		✓
23 Ayers et al., 2012	✓								✓						
24 Ayers et al., 2016	✓	✓			✓				✓	✓					
25 Balls-Berry et al., 2018		✓	✓			✓									
26 Baltrusaitis et al., 2017								✓							
27 Ben-Sasson & Yom-Tov, 2016							✓								
28 Berlinberg et al., 2018	✓														
29 Bernardo et al., 2013															✓
30 Berry et al., 2017		✓													

Authors	Google	Twitter	Facebook	Instagram	Wikipedia	Other Social Media	Blogs/Forums/Communities	Websites/Platforms	News Outlets/Media	Electronic Health Records Databases/Call records/Online Surveys	Other Search Engines	Online Survey	Mobile App	N/A	Review
31	Bian et al., 2017	✓													
32	Birnbaum et al., 2017	✓													
33	Bollegala et al., 2018	✓													
34	Bousquet et al., 2017						✓	✓							
35	Bragazzi, 2013	✓													
36	Bragazzi, 2013	✓													
37	Bragazzi et al., 2016	✓													
38	Bragazzi et al., 2016	✓													
39	Bragazzi et al., 2016	✓													
40	Braithwaite et al., 2016		✓												
41	Brigo & Erro, 2016	✓			✓										
42	Brigo & Trinka, 2015	✓													
43	Brigo et al., 2015	✓						✓							
44	Brigo et al., 2014	✓													
45	Brigo et al., 2015				✓										
46	Brigo et al., 2018				✓										
47	Brigo et al., 2018				✓										
48	Brigo et al., 2014	✓													
49	Brigo et al., 2015				✓										
50	Brigo et al., 2016	✓													
51	Broniatowski et al., 2015	✓	✓												
52	Bubenzer, 2009													✓	
53	Burton et al., 2012	✓													
54	Callahan et al., 2015							✓							
55	Carrotte et al., 2017	✓	✓		✓	✓									
56	Cartwright et al., 2018	✓											✓		
57	Cavazos-Regh et al., 2014		✓												
58	Cawkwell et al., 2015						✓								
59	Chan et al., 2013						✓								
60	Chen & Dredze, 2018		✓												
61	Chen et al., 2018					✓									
62	Chen et al., 2018							✓							
63	Chen et al., 2018		✓												
64	Chen et al., 2015							✓							
65	Cheng et al., 2017							✓							

Authors	Google	Twitter	Facebook	Instagram	Wikipedia	Other Social Media	Blogs/Forums/Communities	Websites/Platforms	News Outlets/Media	Electronic Health Records Databases/Call records/Online Surveys	Other Search Engines	Online Survey	Mobile App	N/A	Review
66	Cheng et al., 2018	✓													
67	Cherian et al., 2018			✓											
68	Chew & Eysenbach, 2010	✓													
69	Chomutare et al., 2011												✓		
70	Christmann et al., 2017												✓		
71	Chu et al., 2015	✓	✓	✓	✓										
72	Clyne et al., 2018		✓												
73	Colditz et al., 2018		✓												
74	Cole-Lewis et al., 2015		✓												
75	Cole-Lewis et al., 2015		✓												
76	Conway, 2014							✓							
77	Cortés et al., 2017		✓												
78	Daniulaityte et al., 2016		✓												
79	Davis et al., 2017		✓												
80	de Viron et al., 2013		✓	✓		✓									
81	Dejohn et al., 2018		✓												
82	Delaney et al., 2014												✓		
83	Delir Haghighi et al., 2017		✓												
84	Doan et al., 2017		✓												
85	Domnich et al., 2014										✓				
86	Du et al., 2016		✓												
87	Du et al., 2018		✓												
88	Duke et al., 2014	✓	✓	✓	✓	✓	✓								
89	Dunn et al., 2015		✓												
90	Dyson et al., 2017		✓				✓								
91	Edney et al., 2018		✓	✓	✓										
92	Eklund, 2012							✓							
93	Espina & Estuar, 2017		✓												
94	Espina et al., 2016		✓												
95	Eysenbach, 2011													✓	
96	Eysenbach, 2009													✓	
97	Farhadloo et al., 2018		✓												
98	Foroughi et al., 2016	✓													
99	Gabarron et al., 2014		✓												
100	Gabarron et al., 2015				✓										

Authors	Google	Twitter	Facebook	Instagram	Wikipedia	Other Social Media	Blogs/Forums/Communities	Websites/Platforms	News Outlets/Media	Electronic Health Records Databases/Call records/Online Surveys	Other Search Engines	Online Survey	Mobile App	N/A	Review
101	García-Díaz et al., 2018	✓													
102	Gayle et al., 2017		✓												
103	Genes et al., 2017		✓												
104	Gianfredi et al., 2018	✓													
105	Gianfredi et al., 2018														✓
106	Giat & Yom-Tov, 2018										✓				
107	Gittelman et al., 2015			✓											
108	Gohil et al., 2018														✓
109	Gough et al., 2017		✓												
110	Grajales et al., 2014	✓	✓			✓	✓	✓			✓				
111	Greaves et al., 2013							✓							
112	Griffis et al., 2014		✓	✓		✓									
113	Gruzd & Haythornthwaite 2013		✓												
114	Gu et al., 2014						✓				✓				
115	Guy et al., 2012														✓
116	Hamad et al., 2016													✓	
117	Hammer, 2017													✓	
118	Hand et al., 2016		✓												
119	Hanson et al., 2013		✓												
120	Hanson et al., 2013		✓												
121	Harris et al., 2014		✓												
122	Harris et al., 2014		✓												
123	Hébert et al., 2017	✓	✓					✓							
124	Hendriks et al., 2018			✓	✓										
125	Hill et al., 2011	✓						✓							
126	Hingle et al., 2013		✓												
127	Hswen et al., 2018		✓												
128	Huang et al., 2018								✓						
129	Huesch et al., 2017			✓											
130	Jankowski & Hoffmann, 2016	✓													
131	Jones et al., 2018						✓								
132	Jung et al., 2015						✓								
133	Jung et al., 2017							✓							
134	Kadry et al., 2011	✓						✓							
135	Kagashe et al., 2017		✓												

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136 Kalf et al., 2018															✓
137 Kandadai et al., 2016		✓													
138 Kandula et al., 2017	✓														
139 Katsuki et al., 2015		✓													
140 Keller et al., 2018			✓					✓							
141 Keller et al., 2017			✓												
142 Kendra et al., 2015		✓													
143 Khan et al., 2012		✓													
144 Khoury et al., 2012														✓	
145 Kim et al., 2015		✓													
146 Kim et al., 2014							✓								
147 Kim et al., 2017															✓
148 Kim et al., 2016		✓													
149 Kim et al., 2017		✓													
150 Klembczyk et al., 2016	✓														
151 Koh et al., 2014							✓								
152 Konheim-Kalkstein et al., 2018							✓								
153 Koschack et al., 2015							✓								
154 Kostkova et al., 2013	✓							✓	✓						
155 Krueger & Young, 2015		✓													
156 Kurzinger et al., 2018							✓								
157 Lachmar et al., 2017		✓													
158 Lama et al., 2018		✓													
159 Lardon et al., 2015															✓
160 Lau et al., 2011															✓
161 Lavorgna et al., 2018															✓
162 Lazard et al., 2016		✓													
163 Leal Neto et al., 2017													✓		
164 Lee et al., 2014		✓													
165 Lee et al., 2016	✓														
166 Lenoir et al., 2017		✓													
167 Leung et al., 2018								✓							
168 Li et al., 2018								✓							
169 Liang & Scammon, 2013	✓														
170 Lienemann et al., 2017															✓

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171	Ling & Lee, 2016	✓													
172	Liu et al., 2010							✓							
173	Liu et al., 2016		✓												
174	Liu et al., 2017										✓				
175	Liu et al., 2017		✓												
176	Liu et al., 2018		✓												
177	Livelo & Cheng, 2018		✓												
178	Lu et al., 2018	✓	✓					✓		✓					
179	Lyles et al., 2016		✓												
180	Mackey & Liang, 2013	✓	✓	✓		✓									
181	Mackey et al., 2018		✓												
182	Madden et al., 2017	✓													
183	Mahoney et al., 2015		✓						✓						
184	Mahroum et al., 2018	✓													
185	Majumder et al., 2016	✓						✓							
186	Manchaiah et al., 2018		✓						✓						
187	Mao et al., 2014							✓							
188	Marcon et al., 2016		✓												
189	Marcus et al., 2012						✓								
190	Martinez et al., 2017												✓		
191	Martinez-Arroyo et al., 2018	✓													
192	Martinez-Millana et al., 2017	✓	✓	✓		✓									
193	Martins-Filho et al., 2018	✓													
194	Massey et al., 2016		✓												
195	Matsuda et al., 2017						✓								
196	Mavragani & Ochoa, 2018	✓													
197	Mavragani & Ochoa, 2018	✓													
198	Mavragani et al., 2018	✓													
199	Mavragani et al., 2018	✓													
200	Mazzocut et al., 2016							✓							
201	McNaughton et al., 2014						✓								
202	Meaney et al., 2016		✓												
203	Mejova et al., 2018			✓											
204	Melver et al., 2015		✓												
205	Menachemi et al., 2017										✓				

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206 Mendiola, 2015														✓	
207 Metwally et al., 2017		✓													
208 Miller et al., 2017		✓													
209 Mishori et al., 2014		✓													
210 Mnadla et al., 2016	✓														
211 Moccia et al., 2018															✓
212 Mollema et al., 2015		✓	✓				✓	✓	✓						
213 Mowery et al., 2017		✓													
214 Mukhija et al., 2017	✓														
215 Muralidhara & Paul, 2018				✓											
216 Myslin et al., 2013		✓													
217 Nagar et al., 2014	✓	✓													
218 Nagel et al., 2013		✓													
219 Nakada et al., 2014								✓	✓						
220 Nakhasi et al., 2014	✓							✓							
221 Nascimento et al., 2014		✓													
222 Nguyen et al., 2016		✓													
223 Nishimoto et al., 2016		✓													
224 Noll-Hussong, 2017	✓														
225 Nsoesie et al., 2014	✓							✓							
226 Odlum et al., 2018		✓													
227 Oldroyd et al., 2018															✓
228 Oser et al., 2017							✓								
229 Ozan-Rafferty, 2014	✓						✓								
230 Pan et al., 2018														✓	
231 Park & Hong, 2018								✓							
232 Peiper et al., 2017		✓													
233 Pervaiz et al., 2012	✓														
234 Pesala et al., 2017										✓					
235 Pesala et al., 2017										✓					
236 Phillips et al., 2018	✓														
237 Poirier et al., 2018	✓									✓					
238 Pretorius et al., 2018		✓													
239 Priest et al., 2016								✓							
240 Rabarison et al., 2017		✓													

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241	Radin & Sciascia, 2017	✓													
242	Radzikowski et al., 2016		✓												
243	Ragestar-Mojarad et al., 2016							✓							
244	Rastegar-Mojarad et al., 2015						✓								
245	Ricard et al., 2018				✓			✓							
246	Risson et al., 2016		✓	✓			✓								
247	Robillard et al., 2013						✓								
248	Rocchetti et al., 2017			✓											
249	Rocheleau et al., 2015		✓												
250	Roberts et al., 2015		✓												
251	Rose et al., 2017		✓												
252	Rosenblum & Yom-Tov, 2017						✓				✓				
253	Sadah et al., 2015	✓	✓				✓	✓							
254	Sadah et al., 2016	✓	✓				✓	✓							
255	Saha et al., 2017	✓		✓											
256	Samaras et al., 2017	✓													
257	Santos & Matos, 2014		✓												
258	Sanz-Lorente et al., 2018		✓	✓	✓	✓									
259	Sarker et al., 2017		✓												
260	Sato et al., 2015						✓								
261	Schlichthorst et al., 2018		✓												
262	Sciascia & Radin, 2017	✓						✓							
263	Sciascia et al., 2018	✓						✓							
264	Seabrook et al., 2018		✓	✓									✓		
265	Seidl et al., 2018	✓													
266	Sentana-Lledo et al., 2016	✓													
267	Seo et al., 2014										✓				
268	Sewalk et al., 2018		✓												
269	SeyyedHosseini et al., 2018	✓						✓							
270	SeyyedHosseini et al., 2017													✓	
271	SeyyedHosseini et al., 2017	✓						✓							
272	Sharpe et al., 2016	✓	✓		✓										
273	Shi & Salmon, 2018					✓									
274	Simpson et al., 2018		✓												
275	Sinha et al., 2018		✓	✓											

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276	Sinnenberg et al., 2018	✓													
277	Smith et al., 2017		✓							✓					
278	Spyropoulos et al., 2018	✓													✓
279	Staal et al., 2018							✓							
280	Stefanidis et al., 2017	✓													
281	Sudau et al., 2014						✓								
282	Sueki, 2015	✓										✓			
283	Sugawara et al., 2016	✓													
284	Sugawara et al., 2017	✓						✓	✓						
285	Surian et al., 2016	✓													
286	Tafti et al., 2017						✓	✓							
287	Tana et al., 2018	✓													
288	Tangherlini et al., 2016							✓							
289	Tapi Nzali et al., 2017		✓				✓								
290	Thackeray et al., 2013	✓													
291	Tighe et al., 2015	✓													
292	Timpka et al., 2014	✓						✓		✓					
293	Tinschert et al., 2017														✓
294	Tougas et al., 2018	✓	✓	✓											
295	Triemstra et al., 2018	✓	✓	✓				✓							
296	Troullos et al., 2014											✓			
297	Tsuya et al., 2014	✓													
298	Tufts et al., 2018	✓													
299	Tyrawski & DeAndrea, 2015	✓				✓									
300	Utengen et al., 2017	✓													
301	van Lent et al., 2017	✓							✓						
302	Vasconcellos-Silva et al., 2017	✓													
303	Vickey & Breslin, 2017	✓													
304	Wagner et al., 2017	✓													
305	Wakamiya, 2018	✓													
306	Wang & Chen, 2018	✓													
307	Wang et al., 2015	✓													
308	Weeg et al., 2015	✓													
309	Williams et al., 2013														✓
310	Winchester et al., 2017	✓	✓			✓									

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311 Wittmeier et al., 2014	✓	✓	✓				✓								
312 Wong et al., 2013								✓							
313 Wong et al., 2015		✓													
314 Wongkoblapp et al., 2017															✓
315 Woo et al., 2016											✓				
316 Wood et al., 2018	✓														
317 Xu & Liu, 2015													✓		
318 Xu et al., 2018			✓												
319 Xu et al., 2016		✓													
320 Yagahara et al., 2018		✓													
321 Yang et al., 2017											✓				
322 Yin et al., 2015		✓													
323 Yom-Tov & Gabrilovich, 2013											✓				
324 Yom-Tov et al., 2014											✓				
325 Yom-Tov et al., 2015					✓						✓				
326 Yom-Tov et al., 2014		✓									✓				
327 Yom-Tov & Lev-Ran, 2017											✓				
328 Young, 2018														✓	
329 Zeraatkar & Ahmadi, 2018															✓
330 Zhan et al., 2017		✓						✓							
331 Zhang et al., 2016	✓														
332 Zhang et al., 2018				✓											
333 Zhang et al., 2014													✓		
334 Zhang et al., 2013		✓													
335 Zhao & Yang, 2018							✓								
336 Zheluk et al., 2012	✓										✓				
337 Zheluk et al., 2013	✓										✓				
338 Zheluk et al., 2014	✓										✓				

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