

SUPPLEMENTARY MATERIAL S1 - SEARCH STRATEGY

Search terms for ACM Digital Library

Search Category	Search Terms
1. Smartphone apps	“smart phone*” OR “smartphone*” OR “smart-phone*” OR “cell*phone*” OR “cell-phone*” OR “mobile phone*” OR “mobile-phone*” OR “mobile device” OR “mobile telephone*” OR “mobile app*” OR “software app*” OR “mhealth” OR “ehealth” OR “e-health” OR “m-health” OR “iphone” OR “android”
2. Chronic Obstructive Pulmonary Disease	“chronic obstructive pulmonary disease” OR “COPD” OR “COAD” OR “chronic obstructive lung disease” OR “chronic obstructive airway disease” OR “chronic airflow obstruction” OR “emphysema” OR “chronic bronchitis”
3. Physical Activity	“physical activit*” OR “exercise?” OR “daily activit*” OR “active living” OR “walk*” OR “leisure activit*” OR “active transport*” OR “motor activit*”
Combination	1 AND 2 AND 3
Limits	01/01/2007 – 21/01/2022 Publication Title and Abstract

Search string:

(“smart phone*” OR “smartphone*” OR “smart-phone*” OR “cell*phone*” OR “cell-phone*” OR “mobile phone*” OR “mobile-phone*” OR “mobile device” OR “mobile telephone*” OR “mobile app*” OR “software app*” OR “mhealth” OR “ehealth” OR “e-health” OR “m-health” OR “iphone” OR “android”) AND (“chronic obstructive pulmonary disease” OR “COPD” OR “COAD” OR “chronic obstructive lung disease” OR “chronic obstructive airway disease” OR “chronic airflow obstruction” OR “emphysema” OR “chronic bronchitis”) AND (“physical activit*” OR “exercise?” OR “daily activit*” OR “active living” OR “walk*” OR “leisure activit*” OR “active transport*” OR “motor activit*”)

Search terms for IEEE Xplore

Search Category	Search Terms
1. Smartphone apps	"smart phone" OR "smart phones" OR "smartphone" OR "smartphones" OR "smart-phone" OR "smart-phones" OR "cell*phone*" OR "cell-phone" OR "cell-phones" OR "mobile phone" OR "mobile phones" OR "mobile-phone" OR "mobile-phones" OR "mobile device" OR "mobile telephone*" OR "mobile app*" OR "software app*" OR "mhealth" OR "ehealth" OR "e-health" OR "m-health" OR "iphone" OR "android"
2. Chronic Obstructive Pulmonary Disease	"chronic obstructive pulmonary disease" OR "COPD" OR "COAD" OR "chronic obstructive lung disease" OR "chronic obstructive airway disease" OR "chronic airflow obstruction" OR "emphysema" OR "chronic bronchitis"
3. Physical Activity	"physical activity" OR "physical activities" OR "exercise" OR "exercises" OR "daily activities" OR "daily activity" OR "active living" OR "walk" OR "walking" OR "leisure activity" OR "leisure activities" OR "active transport*" OR "motor activit*"
Combination	1 AND 2 AND 3
Limits	01/01/2007 – 21/01/2022 All Metadata (metadata includes abstract and title text, and indexing terms)

Search string:

("smart phone" OR "smart phones" OR "smartphone" OR "smartphones" OR "smart-phone" OR "smart-phones" OR "cell*phone*" OR "cell-phone" OR "cell-phones" OR "mobile phone" OR "mobile phones" OR "mobile-phone" OR "mobile-phones" OR "mobile device" OR "mobile telephone*" OR "app" OR "apps" OR "mobile app*" OR "software app*" OR "mhealth" OR "ehealth" OR "e-health" OR "m-health" OR "iphone" OR "android") AND ("chronic obstructive pulmonary disease" OR "COPD" OR "COAD" OR "chronic obstructive lung disease" OR "chronic

obstructive airway disease" OR "chronic airflow obstruction" OR "emphysema" OR "chronic bronchitis") AND ("physical activity" OR "physical activities" OR "exercise" OR "exercises" OR "daily activities" OR "daily activity" OR "active living" OR "walk" OR "walking" OR "leisure activity" OR "leisure activities" OR "active transport*" OR "motor activit*")

Search terms for PubMed

Search Category	Search Terms
1. Smartphone apps	"smart phone*" OR "smartphone*" OR "smart-phone*" OR "cell*phone*" OR "cell-phone*" OR "mobile phone*" OR "mobile-phone*" OR "mobile device" OR "mobile telephone*" OR "mobile app*" OR "software app*" OR "mhealth" OR "ehealth" OR "e-health" OR "m-health" OR "iphone" OR "android"
2. Chronic Obstructive Pulmonary Disease	"chronic obstructive pulmonary disease" OR "COPD" OR "COAD" OR "chronic obstructive lung disease" OR "chronic obstructive airway disease" OR "chronic airflow obstruction" OR "emphysema" OR "chronic bronchitis"
3. Physical Activity	"physical activit*" OR "exercise*" OR "daily activit*" OR "active living" OR "walk*" OR "leisure activit*" OR "active transport*" OR "motor activit*"
Combination	1 AND 2 AND 3
Limits	Humans 01/01/2007 – 21/01/2022 English, Portuguese Title/Abstract

Search string:

(("smart phone*" [Title/Abstract] OR "smartphone*" [Title/Abstract] OR "smart-phone*" [Title/Abstract] OR "cell*phone*" [Title/Abstract] OR "cell-phone*" [Title/Abstract] OR "mobile phone*" [Title/Abstract] OR "mobile-phone*" [Title/Abstract] OR "mobile device" [Title/Abstract] OR "mobile telephone*" [Title/Abstract] OR "mobile app*" [Title/Abstract] OR "software app*" [Title/Abstract] OR "mhealth" [Title/Abstract] OR "ehealth" [Title/Abstract] OR "e-health" [Title/Abstract] OR "m-health" [Title/Abstract] OR "iphone" [Title/Abstract] OR "android" [Title/Abstract]) AND ("chronic obstructive pulmonary disease" [Title/Abstract] OR "COPD" [Title/Abstract] OR "COAD" [Title/Abstract] OR "chronic

obstructive lung disease"[Title/Abstract] OR "chronic obstructive airway disease"[Title/Abstract] OR "chronic airflow obstruction"[Title/Abstract] OR "emphysema"[Title/Abstract] OR "chronic bronchitis"[Title/Abstract])) AND ("physical activit*"[Title/Abstract] OR "exercise*"[Title/Abstract] OR "daily activit*"[Title/Abstract] OR "active living"[Title/Abstract] OR "walk*"[Title/Abstract] OR "leisure activit*"[Title/Abstract] OR "active transport*"[Title/Abstract] OR "motor activit*"[Title/Abstract])

Search terms for Scopus

Search Category	Search Terms
1. Smartphone apps	"smart phone*" OR "smartphone*" OR "smart-phone*" OR "cell*phone*" OR "cell-phone*" OR "mobile phone*" OR "mobile-phone*" OR "mobile device" OR "mobile telephone*" OR "mobile app*" OR "software app*" OR "mhealth" OR "ehealth" OR "e-health" OR "m-health" OR "iphone" OR "android"
2. Chronic Obstructive Pulmonary Disease	"chronic obstructive pulmonary disease" OR "COPD" OR "COAD" OR "chronic obstructive lung disease" OR "chronic obstructive airway disease" OR "chronic airflow obstruction" OR "emphysema" OR "chronic bronchitis"
3. Physical Activity	"physical activit*" OR "exercise*" OR "daily activit*" OR "active living" OR "walk*" OR "leisure activit*" OR "active transport*" OR "motor activit*"
Combination	1 AND 2 AND 3
Limits	01/01/2007 – 21/01/2022 English Article title, Abstract, Keywords

Search string:

("smart phone*" OR "smartphone*" OR "smart-phone*" OR "cell*phone*" OR "cell-phone*" OR "mobile phone*" OR "mobile-phone*" OR "mobile device" OR "mobile telephone*" OR "mobile app*" OR "software app*" OR "mhealth" OR "ehealth" OR "e-health" OR "m-health" OR "iphone" OR "android") AND ("chronic obstructive pulmonary disease" OR "COPD" OR "COAD" OR "chronic obstructive lung disease" OR "chronic obstructive airway disease" OR "chronic airflow obstruction" OR "emphysema" OR "chronic bronchitis") AND ("physical activit*" OR "exercise*" OR "daily activit*" OR "active living" OR "walk*" OR "leisure activit*" OR "active transport*" OR "motor activit*")

Search terms for Web of Science

Search Category	Search Terms
1. Smartphone apps	<p>“smart phone*” OR “smartphone*” OR “smart-phone*” OR “cell*phone*” OR “cell-phone*” OR “mobile phone*” OR “mobile-phone*” OR “mobile device” OR “mobile telephone*” OR “mobile app*” OR “software app*” OR “mhealth” OR “ehealth” OR “e-health” OR “m-health” OR “iphone” OR “android”</p>
2. Chronic Obstructive Pulmonary Disease	<p>“chronic obstructive pulmonary disease” OR “COPD” OR “COAD” OR “chronic obstructive lung disease” OR “chronic obstructive airway disease” OR “chronic airflow obstruction” OR “emphysema” OR “chronic bronchitis”</p>
3. Physical Activity	<p>“physical activit*” OR “exercise*” OR “daily activit*” OR “active living” OR “walk*” OR “leisure activit*” OR “active transport*” OR “motor activit*”</p>
Combination	1 AND 2 AND 3
Limits	<p>01/01/2007 – 28/01/2022 English Title and Abstract</p>

Search string:

(“smart phone*” OR “smartphone*” OR “smart-phone*” OR “cell*phone*” OR “cell-phone*”
 OR “mobile phone*” OR “mobile-phone*” OR “mobile device” OR “mobile telephone*” OR
 “mobile app*” OR “software app*” OR “mhealth” OR “ehealth” OR “e-health” OR “m-health”
 OR “iphone” OR “android”) AND (“chronic obstructive pulmonary disease” OR “COPD” OR
 “COAD” OR “chronic obstructive lung disease” OR “chronic obstructive airway disease” OR
 “chronic airflow obstruction” OR “emphysema” OR “chronic bronchitis”) AND (“physical
 activit*” OR “exercise*” OR “daily activit*” OR “active living” OR “walk*” OR “leisure activit*”
 OR “active transport*” OR “motor activit*”)