



Implementing improved asthma self-management as routine

Jones M¹, Davies F¹, Driscoll T¹, Hammersley V², Jackson T², Macleod C², Mugglestone W¹, O'Neill C¹, Parsons J¹, Sheringham J³, Fitzsimmons D¹, Pinnock H² on behalf of the IMP²ART research team

¹ Swansea University; ² Usher Institute, University of Edinburgh; ³ University College London

Aim: Does facilitating the implementation of supported self management (SSM) in primary care practices risk exacerbating inequities, and if so, how can facilitation and other strategies be adapted to support implementation of SSM in under-served groups?

Why does equity matter?

SSM improved asthma outcomes, but implementation may not benefit all patients equally.

Conventional economic evaluation focuses on average cost-effectiveness and may therefore mask inequalities in who gains from an intervention.

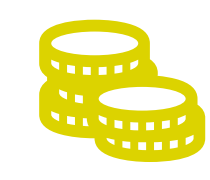
Our question



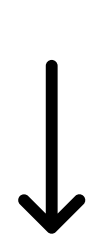
Does implementing SSM effect asthma outcomes equitably or could it widen existing inequalities?

From efficiency to equity

Traditional economic evaluation



Average costs



Average QALYs

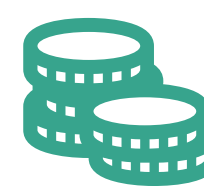
Is it cost-effective?



IMP²ART-E



Who gains?

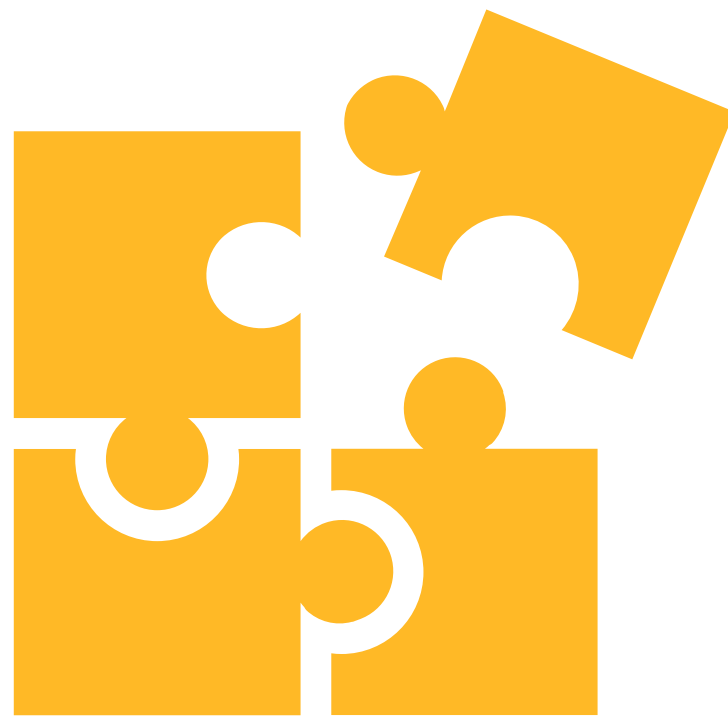


Who bears the costs?

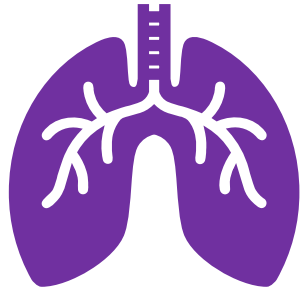


Who is left behind?

**Is it cost-effective?
AND
Is it equitable?**



Methods



IMP²ART cluster trial
Whole system implementation of SSM

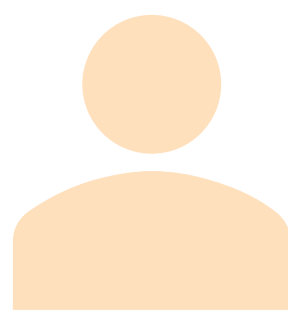
1. Identify relevant subgroups (from the literature, the data and stakeholder engagement)



Deprivation



Ethnicity

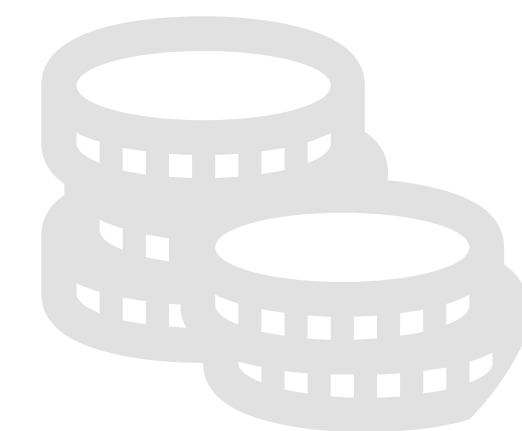


Age



Comorbidities

2. Estimate differences



Costs

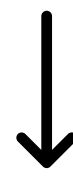


QALYs

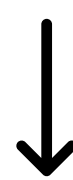


Unscheduled care

3. Estimate subgroup cost-effectiveness
Who gets the greatest health gain?



4. Distributional cost-effectiveness analysis (DCEA)
How are health gains distributed across population groups?



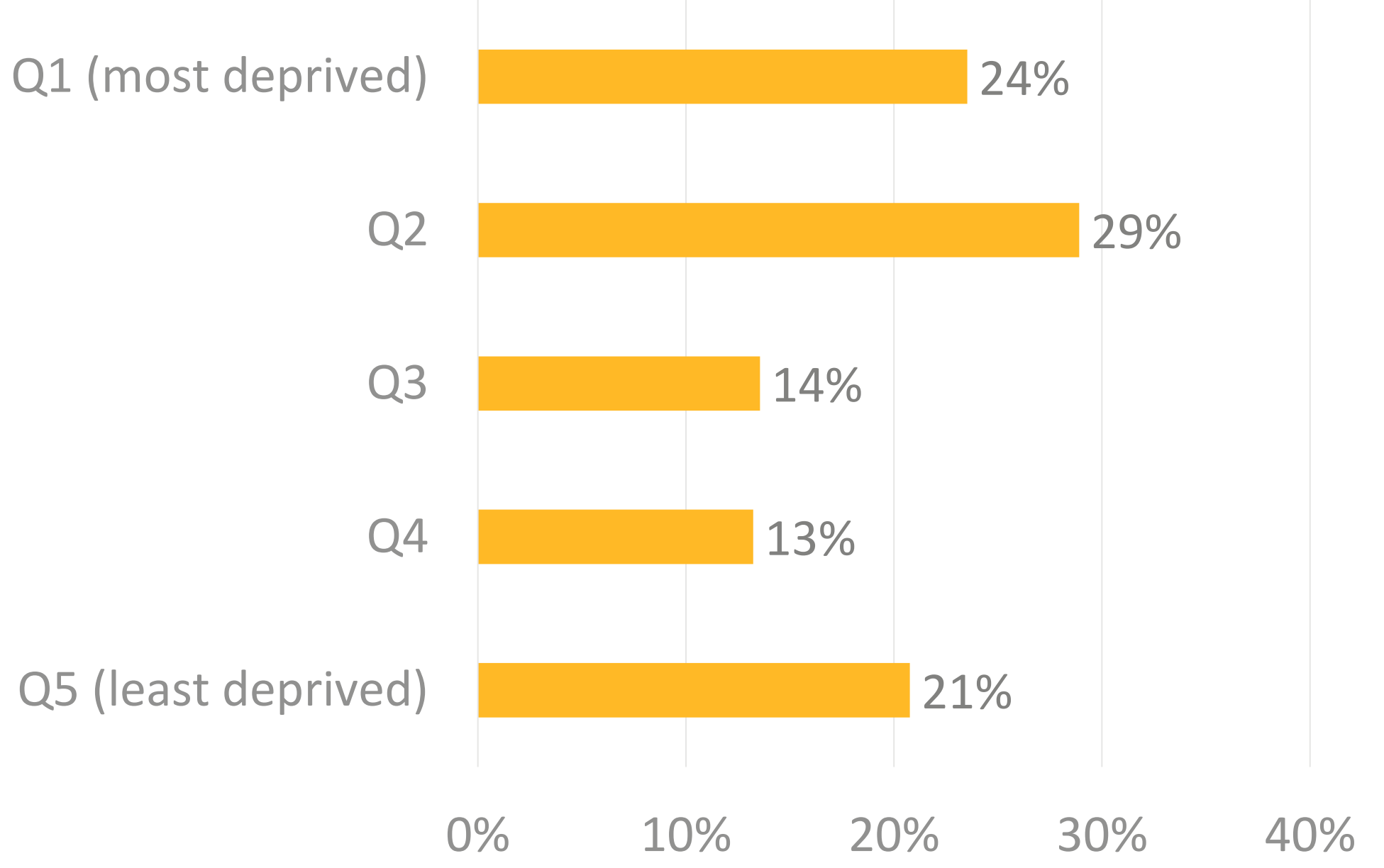
5. Equity-efficiency trade off
What are the implications for decision making?

What is DCEA?

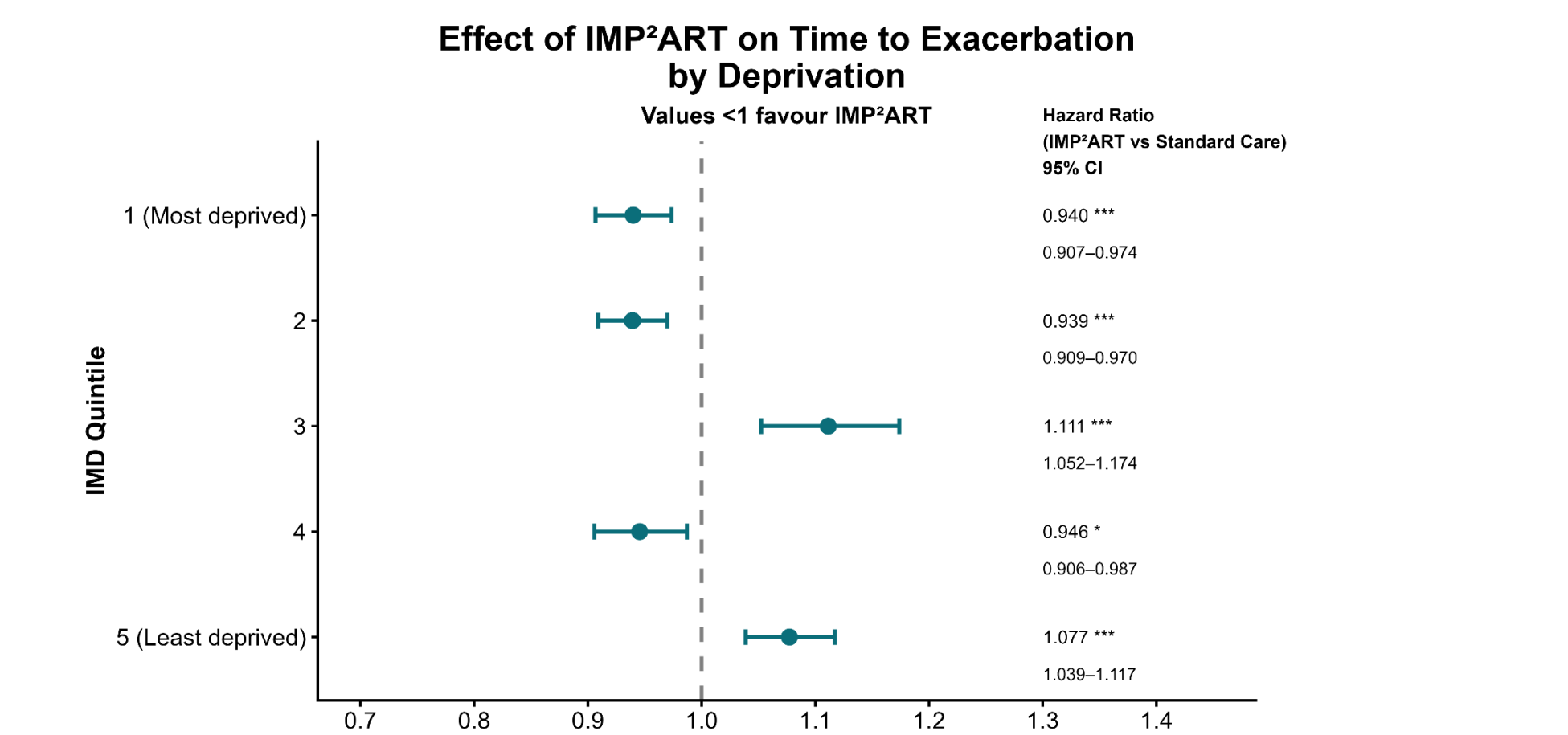
Distributional cost-effectiveness analysis extends conventional economic evaluation by examining how health gains and costs are distributed across population groups.

Preliminary findings: deprivation

Who is represented in the data?
Over 50,000 patients across IMD quintiles

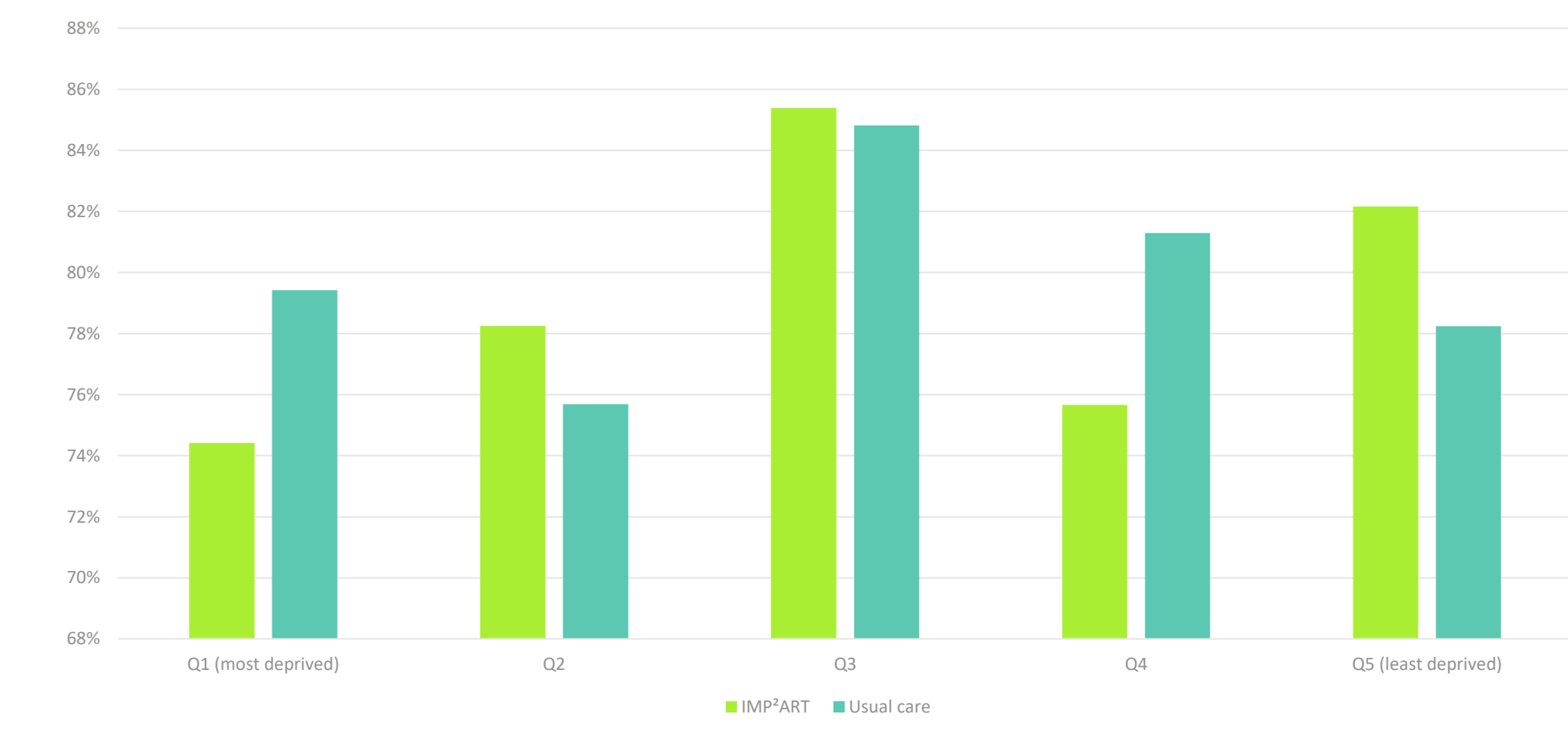


Preliminary analyses suggest that the association between IMP²ART allocation and exacerbation risk varies across IMD quintiles.



* p < 0.05 ** p < 0.01 *** p < 0.001

Patients with no exacerbations during follow-up (%)



Why this matters?
Average treatment effects may mask differences between population groups.



1. Look beyond averages
Average cost-effectiveness can hide important differences between population groups.



2. Make inequalities visible
DCEA shows how costs and health outcomes are distributed across the population



3. Inform equitable implementation
Combining economic evaluation and stakeholder engagement to design implementation strategies without widening inequalities

Conclusion: Economic evaluation can tell us whether an intervention represents good value for money – but IMP²ART-E asks an additional question:
Who benefits, and who might be left behind?



THE UNIVERSITY of EDINBURGH



Queen Mary University of London



The University of Sheffield.



Swansea University Prifysgol Abertawe

For more information contact imp2art@ed.ac.uk or visit our website usher.ed.ac.uk/imp2art