

## 6 Scaling up prevention and management of alcohol use disorders and comorbid depression in Latin America – The impact of training primary health care providers

### Summary

Alcohol is a leading risk factor for morbidity and premature mortality, including for a wide range of cancers, and cardiovascular and gastrointestinal diseases.<sup>115</sup> Funded by the European Commission (overall budget €2.6 million), the SCALA study is a study which aims to test the implementation of primary health care (PHC)-based programmes, embedded in a community and municipal setting, for the measurement, management, and prevention of Alcohol Use Disorders (AUD) and comorbid depression in Colombia, Mexico, and Peru.<sup>125</sup>

The SCALA project is led by Professor Peter Anderson, (Maastricht University, Netherlands) and Dr Eva Jané-Llopis (ESADE Business School, Spain).<sup>116</sup> The study team combines expertise from Netherlands, Peru, Colombia, Germany, Mexico, Spain, and the UK. It was an equitable partnership and had close stakeholder engagement from the start, including from the ministries of health from all countries (local and national level), the Pan American Health Organisation (PAHO), and the community. **The early engagement of local and national stakeholders via Community Advisory Boards was a major enabler as it created buy-in and interest from the start.**

Findings so far demonstrate a clear impact of training.<sup>117</sup> **Centres whose providers received training measured the alcohol consumption of a nearly ten times higher proportion of patients than centres whose providers had not received training.** As the project draws to a close, the study team is looking at ensuring the sustainability of the implemented programmes. **The Ministries of Health in Colombia, Mexico, and Peru are very interested in building on the study and scaling it up. The engagement with PAHO is expected to facilitate wider scale-up within and outside the three study countries.**

The study has delivered pre-implementation training to 309 providers and booster training to 177 PHC providers.<sup>118</sup> Over the course of the study, it is estimated that 30,000 new patients will be measured for their alcohol consumption, 1,500 newly identified heavy drinkers will be advised and treated, and over 500 new patients will be identified and treated for comorbid depression.<sup>118</sup>

The study team plans to produce a validated framework and strategy with guidance on implementation and scale-up as well as guidance on approaches for use in pandemics, including tele-medicine approaches.<sup>118</sup> This should be a key tool for more widespread adoption and implementation of PCH-based programmes for prevention of AUD and comorbid depression.

<sup>115</sup> Shield KD, Manthey J, Rylett M, Probst C, Wettlaufer A, Parry CDH, Rehm J. National, regional, and global burdens of disease from 2000 to 2016 attributable to alcohol use: a comparative risk assessment study. *Lancet Public Health*. 2020;5(1):e51-e61. [https://doi.org/10.1016/S2468-2667\(19\)30231-2](https://doi.org/10.1016/S2468-2667(19)30231-2).

<sup>116</sup> <https://www.scalaproject.eu/index.php/about-scala/partners>

<sup>117</sup> Anderson P, Manthey J, Jané-Llopis E, *et al.* (2021) Impact of training and municipal support on primary health care-based measurement of alcohol consumption in three Latin American countries: five-month outcome results of the quasi-experimental randomized SCALA trial. *Journal of general internal medicine*, 1-9. doi.org/10.1007/s11606-020-06503-9.

<sup>118</sup> <https://cordis.europa.eu/project/id/778048/reporting>

## 6.1 Background

Alcohol is a leading risk factor for morbidity and premature mortality, including for a wide range of cancers, and cardiovascular and gastrointestinal diseases.<sup>119</sup> In Latin America as well, excessive alcohol consumption contributes to ill-health and premature death in the population.<sup>120</sup>

A number of meta-analyses and systematic reviews have demonstrated the impact and cost-effectiveness of primary health care (PHC)-based measurement and advice programmes in reducing heavy drinking.<sup>121</sup> Despite this, few governments have implemented such programmes countrywide owing to lack of motivation, time, or adequate training and support materials among other reasons.<sup>122</sup> Conversely, more time, less intense programmes, and more active patients asking for alcohol advice facilitate implementation of PHC-based interventions.<sup>123,124</sup>

Based on this literature, it is understood that PHC-based activities could be improved by considering the underlying barriers and facilitators, and embedding the activities within the community.

## 6.2 The award

Funded by the European Commission (overall budget €2.6 million) under the GACD's mental health theme, the SCALA study started in 2018 and is due to run until November 2021.<sup>125</sup> It is a three-country study which aims to test the implementation of primary health care (PHC)-based programmes, embedded in a community and municipal setting, for the measurement, management, and prevention of Alcohol Use Disorders (AUD) and comorbid depression.<sup>125</sup> The uniqueness and strength of SCALA lies in the recognition it gives to comorbid depression alongside heavy drinking, by building in appropriate identification and referral mechanisms into the interventions, as well as the novel approach of embedding and scaling-up PHC activity within municipalities, using a series of municipal-based adoption mechanisms, support systems, and communication campaigns.<sup>126</sup>

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<sup>119</sup> Shield KD, Manthey J, Rylett M, Probst C, Wettlaufer A, Parry CDH, Rehm J. National, regional, and global burdens of disease from 2000 to 2016 attributable to alcohol use: a comparative risk assessment study. *Lancet Public Health*. 2020;5(1):e51-e61. [https://doi.org/10.1016/S2468-2667\(19\)30231-2](https://doi.org/10.1016/S2468-2667(19)30231-2).

<sup>120</sup> GBD 2015 Risk Factors Collaborators. Global, regional and national comparative risk assessment of 79 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990-2015: a systematic analysis for the Global Burden of Disease Study 2015. *Lancet*. 2016;388:1659-1724.

<sup>121</sup> Summarised by Anderson P, Manthey J, Jané-Llopis E, *et al.* (2021) Impact of training and municipal support on primary health care-based measurement of alcohol consumption in three Latin American countries: five-month outcome results of the quasi-experimental randomized SCALA trial. *Journal of general internal medicine*, 1-9. [doi.org/10.1007/s11606-020-06503-9](https://doi.org/10.1007/s11606-020-06503-9).

<sup>122</sup><sup>122</sup> Drummond C, Wolstenholme A, Deluca P, *et al.* Alcohol interventions and treatment in Europe. In Anderson P, Braddick F, Reynolds J, Gual A (eds). *Alcohol Policy in Europe: Evidence from AMPHORA*. 2nd edn. The AMPHORA Project. 2013. [http://amphoraproject.net/w2box/data/e-book/Chapter%209%20-%20AM\\_E-BOOK\\_2nd%20edition%20-%20July%202013.pdf](http://amphoraproject.net/w2box/data/e-book/Chapter%209%20-%20AM_E-BOOK_2nd%20edition%20-%20July%202013.pdf).

<sup>123</sup><sup>123</sup> McAvoy BR, Donovan RJ, Jalleh G *et al.* General practitioners, prevention and alcohol—a powerful cocktail? Facilitators and inhibitors of practising preventive medicine in general and early intervention for alcohol in particular: a twelve nation key informant and general practitioner study. *Drugs Educ Prev Pol*. 2001;8:103–17.

<sup>124</sup> Nilsen P, Aalto M, Bendtsen P, Seppä K. Effectiveness of strategies to implement brief alcohol intervention in primary healthcare, *Scand J Prim Health Care*. 2006;24(1):5-15. <https://doi.org/10.1080/02813430500475282>.

<sup>125</sup> <https://cordis.europa.eu/project/id/778048>

<sup>126</sup> <https://cordis.europa.eu/project/id/778048/reporting>

The study objectives are:<sup>127</sup>

1. To deliver a tailored package for improving prevention and early identification of heavy drinking that is scalable at municipal level in a wide range of middle-income countries
2. To set-up and implement the scalable package with key stakeholders in three municipal areas in Colombia, Mexico, and Peru
3. To test the impact of the scale-up of the package on provider delivery of early identification and management
4. To identify and document the facilitators and barriers, and the organisational and resource requirements for full scale-up
5. To present a validated framework and strategy for full scale-up and embedding the package into routine policy and practice that can be replicated globally in the future throughout municipalities

The SCALA project is led by Professor Peter Anderson, (Maastricht University, the Netherlands) and Dr Eva Jané-Llopis (ESADE Business School, Spain).<sup>128</sup> The study team combines expertise from both Europe and Latin America with researchers from the Netherlands (Maastricht University), Peru (Cayetano Heredia Peruvian University), Colombia (Corporación Nuevos Rumbos), Germany (Technical University Dresden, University Medical Center Hamburg-Eppendorf), Mexico (Ramón de la Fuente Muñiz National Institute of Psychiatry), Spain (ESADE Business School, Fundació Clínic per a la Recerca Biomèdica), and the UK (Newcastle University).

SCALA adopted a quasi-experimental approach and involved 58 PHC centres from municipal areas within Bogotá (Colombia), Mexico City (Mexico) and Lima (Peru). Within the municipal areas, centres were randomised to four arms:<sup>129</sup>

1. care as usual (control)
2. training alone
3. training and municipal support using a less intensive clinical and training package
4. training and municipal support using a more intense clinical and training package

The project uses different capacity-building and training approaches for a range of stakeholders including health care professionals as well as municipal adoption and support mechanisms for joined-up action to improve health literacy and to prevent and manage AUD and comorbid depression.<sup>130</sup> The three interventions tested are:<sup>131</sup>

1. Intensity of clinical package and training (standard and short)
2. Training of providers
3. Community integration and support

The set-up phase comprised the first 18 months of the project and involved preparation of the clinical and training materials in English and Spanish, recruitment and randomisation of PHC centres, and finalisation and testing of all data collection instruments.<sup>131</sup> Stakeholder

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<sup>127</sup> GACD Annual Scientific Meeting project update 2020

<sup>128</sup> <https://www.scalaproject.eu/index.php/about-scala/partners>

<sup>129</sup> GACD Annual Scientific Meeting project update 2020

<sup>130</sup> <https://cordis.europa.eu/project/id/778048>

<sup>131</sup> <https://cordis.europa.eu/project/id/778048/reporting>

engagement mechanisms were also embedded into the study at this stage with the setup of Community Advisory Boards (comprising managers of PHC centres, PHC providers, municipal and regional health department representatives, communication specialists, non-government organisations and academia) and appointment of a local Project Champion to oversee and advise on local implementation and later scale-up. Appropriate adoption and support mechanisms as well as community-based communication campaigns were identified at this stage for implementation in municipal contexts.

The second 18 months of the project comprised the implementation phase. The initial one month involved baseline measurement at the 58 participating PHC centres. After full implementation for five months, implementation was disrupted because of COVID-19. Nonetheless, partial implementation was maintained for nine months with some adaptations to the approach as follows:<sup>131</sup>

- Regular contact with all PHC centres
- Mental well-being support and resilience training to PHC providers
- Tailored and adapted clinical interventions and protocols, community support mechanisms, communication campaigns and measurement instruments
- Online training programmes for PHC providers
- Tele-medicine approaches for measurement and advice in Peru when face-to-face consultations not possible

Phase 2 of implementation started in December 2020 and expected to run up to July 2021.

The team was completely horizontally integrated with all partners having equal access to the data and equal rights for publication. There was a steep learning curve for some of the European partners especially in terms of learning to work in the Latin American context and with Latin American partners. Additionally, team members learned and introduced new remote working practices owing to the COVID-19 pandemic. This did not require major adaptation as most of the meetings and communication was already online owing to the multi-country and multi-continent nature of the project.

An early enabler was the involvement of the relevant ministries of health at different jurisdiction levels (e.g. city, community) right from the proposal stage. As the Mexican team did a lot of work for the Pan American Health Organisation (PAHO), it was engaged quite early on with the study, which was also an asset. Moreover, early engagement of local and national stakeholders via Community Advisory Boards was a major enabler as it created buy-in and interest from the start.

### 6.3 Outputs, outcomes, impacts

Findings so far demonstrate a clear impact of training.<sup>132</sup> **Centres whose providers received training measured the alcohol consumption of a nearly ten times higher proportion of patients than centres whose providers had not received training** (in the absence of community support). The expectation was that community support would lead to higher coverage, but the results so far have not been able to demonstrate this.<sup>132</sup> However, community support might lead to cumulative effects over time. In addition, there was no difference between the standard and

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<sup>132</sup> Anderson P, Manthey J, Jané-Llopis E, *et al.* (2021) Impact of training and municipal support on primary health care-based measurement of alcohol consumption in three Latin American countries: five-month outcome results of the quasi-experimental randomized SCALA trial. *Journal of general internal medicine*, 1-9. doi.org/10.1007/s11606-020-06503-9.

less intense clinical measurement and advice packages. Thus, the shorter less intense package was deemed appropriate for wider scale-up.<sup>133</sup>

**In the context of COVID-19, the SCALA study also provides a model for adapting and responding to implementation and research constraints imposed by the number of cases as well as mitigation measures.**<sup>134</sup>

Nine scientific papers have been submitted for publication, three of which have been published. Members of the team has delivered 11 conference presentations and has also presented the project during World Mental Health Day, 14th October 2020. The study team is due to deliver a webinar for PAHO on 28 June 2021 on the SCALA study for an audience of health professionals, public health managers, technicians, students, and interested members of the public.<sup>135</sup>

In addition to the study protocol and communication plan, the study has developed an intervention package, municipal action plans and training materials (both in English and Spanish) along with internet-based training programmes for PHC providers and tele-medicine approaches for measurement and advice for heavy drinking and comorbid depression.<sup>136</sup>

**Professor Anderson is collaborating with WHO Europe on a manual for PHC-based measurement and intervention programmes covering all the lifestyle risk factors – alcohol, tobacco, eating and physical activity.** The SCALA study findings will feed into this manual.

*SCALA study team delivering training workshops in Mexico*



Source: SCALA study team.

<sup>133</sup> <https://www.scalaproject.eu/index.php/the-scala-study>

<sup>134</sup> <https://cordis.europa.eu/project/id/778048/reporting>

<sup>135</sup> <https://www.paho.org/en/events/webinar-scala-project-implementing-intervention-alcohol-use-disorders-latin-america>

<sup>136</sup> <https://cordis.europa.eu/project/id/778048/reporting>

The study has delivered pre-implementation training to 309 providers and booster training to 177 PHC providers.<sup>136</sup> Ten out of 12 adoption and support mechanisms have already been provided to 29 PHC centres and communication campaigns to 20 PHC centres.<sup>136</sup> A “train the trainer” approach was adopted and delivered in short 1-to-2-hour sessions to minimise the burden on the trainees but also provide the appropriate information in a very targeted manner. For instance, several case study vignettes were developed for countries to readapt and tailor programmes to the local circumstances.

Two PhD students at Maastricht University worked on the project, developing their research skills, while one researcher from the Colombian team came to Europe for a PhD.

#### 6.4 Potential for future impact

**SCALA supports implementation of the WHO Mental Health Action Plan 2013-2020**, helping to close treatment gaps and reduce stigma and social exclusion. It also has the potential to contribute to UN Sustainable Development Goal 3, in particular 3.5 which is to strengthen the prevention and treatment of the harmful use of alcohol.

**Over the course of the study, it is estimated that 30,000 new patients will be measured for their alcohol consumption, 1,500 newly identified heavy drinkers will be advised and treated, and over 500 new patients will be identified and treated for comorbid depression.**<sup>136</sup>

As the project draws to a close, the study team is looking at ensuring the sustainability of the implemented programmes. The trained PHC personnel and providers and adoption and support mechanisms provided should enable sustainability to some degree in the PHC centres engaged. Moreover, the **Ministries of Health in all three study countries – Colombia, Mexico, and Peru – are actively engaged in the study.** The intervention has been expanded within the cities of Bogota and Mexico City, and the next step would be to expand it to other parts of the country. Whether this will happen will depend on a diverse set of factors e.g. political, economic, etc. but there is a lot of positive interest to build on the work of the study and scale it up. **The engagement with PAHO (including the planned webinar on 28<sup>th</sup> June 2021) is expected to facilitate wider scale-up within and outside the three study countries.**

The study has the potential to facilitate country-specific priority setting for the interventions and is assessing the resource requirements (data, personnel, financing) and benefits (health and economic) from a long-term perspective so as to ensure other countries in the region, and globally, have the tools and information to select the best-buy programme/s and make appropriate policy decisions.<sup>137</sup> The study team plans to produce a validated framework and strategy for this purpose with guidance on implementation and scale-up as well as guidance on approaches for use in pandemics, including tele-medicine approaches.<sup>138</sup>

Ultimately, as Professor Anderson states "*SCALA has shown that busy PHC providers can measure their patients' alcohol consumption and give advice to heavy drinkers to cut down during normal consultations, even at times of severe external stress, such as the COVID-19 epidemic*". Hence, the study findings have potential to help decrease the non-communicable disease burden in Latin America and worldwide.

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<sup>137</sup> <https://cordis.europa.eu/project/id/778048>

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