

<b>Institution: Queen Mary University of London</b>		
<b>Unit of Assessment: 2</b>		
<b>Title of case study: Developing DIALOG+, a Therapeutically Effective Intervention for Mental Health Care</b>		
<b>Period when the underpinning research was undertaken: 2002- 2020</b>		
<b>Details of staff conducting the underpinning research from the submitting unit:</b>		
<b>Name(s):</b>	<b>Role(s) (e.g. job title):</b>	<b>Period(s) employed by submitting HEI:</b>
1) Stefan Priebe	1) Professor of Social and Community Psychiatry	1) 1997 - present
2) Victoria Bird	2) Professor in Mental Health Care	2) 2014 - present
<b>Period when the claimed impact occurred: 2014 - 2020</b>		
<b>Is this case study continued from a case study submitted in 2014? N</b>		
<p><b>1. Summary of the impact</b> (indicative maximum 100 words)</p> <p>DIALOG+ is a Queen Mary developed psychological intervention that turns routine patient-clinician meetings in mental health care into therapeutically effective interventions. Supported through the use of an app, DIALOG+ is routinely used across all secondary care patients in East London, Luton and Bedfordshire, Norfolk and Suffolk (currently &gt;8,000 patients from 2015). The DIALOG scale (a component of the DIALOG+ intervention) is now part of the NHS Outcomes Programme as of 2016, and is recommended for use by all early intervention teams in England (&gt;18,600 patients) and is recommended for patients receiving mental health services in London (&gt;100,000 patients). When DIALOG+ is repeatedly used over six months, it has been shown to improve patients' quality of life and reduce treatment costs. The app has been translated into 17 languages.</p>		
<p><b>2. Underpinning research</b> (indicative maximum 500 words)</p> <p>Patient-clinician meetings are at the centre of routine mental health care. They enable the monitoring of symptoms, the co-ordination of care and the referral of patients if necessary. Queen Mary's DIALOG+ intervention and app turns routine patient-clinician meetings in mental health care into effective interventions that deliver assessment, planning, intervention and evaluation in one procedure. The intervention is based on quality of life research, concepts of patient-centred communication, advanced software (in collaboration with Prof. Healey at Queen Mary's School of Electronic Engineering and Computer Science) and solution-focused therapy. It incorporates the DIALOG scale, where patients rate their satisfaction in eight life domains through 11 questions and three treatment aspects on a 7-point scale. The scale provides a score for both subjective quality of life and treatment satisfaction.</p> <p>A precursor of Queen Mary's DIALOG+ was tested in a randomised control trial (RCT) (European Commission funded) in 6 European countries to improve the quality of life of patients with psychosis in the community over a one-year period. It was found to be effective but with a small effect size [3.1]. Following this, the NIHR funded a project to strengthen the intervention and test it in a cluster RCT in London. Using DIALOG+ in routine meetings about 4.5 times over a 6 month period led to better quality of life (with an effect size at least as large as specialised interventions such as cognitive behavioural therapy), reduced symptoms, better outcomes for independent living, work and social relationships and reduced treatment costs of approximately GBP1,500 per patient per year [3.2, 3.3].</p> <p>Further analyses [3.4] indicated that DIALOG+ is likely to be effective because it successfully structures the patient-clinician communication, makes it patient-centred and empowers patients to be active in seeking solutions to their problems. It also provides a user-friendly, brief, meaningful and evidence-based outcome measure for service evaluation and improvement. Prof. Priebe has since replicated these findings in other international settings, with a small-scale study in Austria highlighting how DIALOG+ led to large improvements in symptoms of psychosis and better quality of life when used as a brief intervention delivered by psychologists [3.5].</p> <p>Over the first 3 years of DIALOG+ being in routine implementation, a service evaluation of</p>		

routinely collected data indicated that the intervention has been used in over 18,000 sessions completed in East London alone, with an additional 1,200-1,500 sessions taking place each month. The evaluation also highlighted the positive impact of DIALOG+ – across time points, patients on average increase their DIALOG quality of life scores by 0.47, with a 0.94-point improvement in mental health. On the DIALOG quality of life score there are eight items, each rating satisfaction with one separate area of life (one of which is mental health). Each item is rated from 1 (totally dissatisfied) to 7 (totally satisfied). An improvement of 0.5 equates to an improvement by one scale point in every other area of life (or two scale points in one of four areas and so on). The improvement in the mental health scale represents an average improvement close to one whole scale point, showing the clinical significance of the intervention demonstrated in the evaluation. Phases of treatment showed a prediction of improvement too, with higher scores at reviews and discharge when compared to the initial assessment.

DIALOG+ is now at the heart of a large global mental health programme. Queen Mary has completed 3 RCTs and 3 cohort studies to assess the effectiveness of DIALOG+ in order to improve mental health services in Bosnia-Herzegovina, Colombia, Uganda, Peru, Pakistan and Argentina. Services in the countries included in this research are continuing to use the intervention in their routine practice, despite the research concluding [3.6].

Thus, the Queen Mary developed intervention, DIALOG+, has been shown to be therapeutically effective. It has since been taken up into routine mental healthcare at both a national and international level.

### 3. References to the research (indicative maximum of six references)

- [3.1] Priebe, S., McCabe, R., Bullenkamp, J., Hansson, L., Lauber, C., Martinez-Leal, R., Roessler, W., Salize, H., Svensson, B., Torres-Gonzales, F., van den Brink, R., Wiersma, D. & Wright, D. (2007). Structured patient-clinician communication and 1-year outcome in community mental healthcare. Cluster randomised controlled trial (DIALOG). *The British Journal of Psychiatry*, 191, 420-426. <https://doi.org/10.1192/bjp.bp.107.036939>
- [3.2] Priebe, S., Golden, E., McCabe, R. & Reininghaus, U. (2012). Patient-reported outcome data generated in a clinical intervention in community mental health care – psychometric properties. *BMC Psychiatry*, 12, 113. <https://doi.org/10.1186/1471-244X-12-113>
- [3.3] Priebe, S., Kelley, L., Omer, S., Golden, E., Walsh, S., Khanom, H., Kingdon, D., Rutterford, C., McCrone, P. & McCabe, R. (2015). The effectiveness of a patient-centred assessment with a solution-focused approach (DIALOG+) for patients with psychosis: A pragmatic cluster-randomised controlled trial in community care. *Psychotherapy and Psychosomatics*, 84 (5), 304-313. <https://doi.org/10.1159/000430991>
- [3.4] Priebe, S., Golden, E., Kingdon, D., Omer, S., Walsh, S., Katevas, K., McCrone, P., Eldridge, S. & McCabe, R. (2017). Effective patient-clinician interaction to improve treatment outcomes for patients with psychosis: a mixed methods design (DIALOG+). *Programme Grants for Applied Research*, 5 (6). <https://doi.org/10.3310/pgfar05060>
- [3.5] Fichtenbauer, I., Priebe, S. & Schrank, B. (2019). The German Version of DIALOG+ for Patients with Psychosis - A Pilot Study. *Psychiatrische Praxis*, 46 (7), 376-380. <https://doi.org/10.1055/a-0961-3328>
- [3.6] Priebe, S., Fung, C., Sajun, S. Z., Alinaitwe, R., Giacco, D., Gómez-Restrepo, C., Kulenovič, A. D., Nakasujja, N., Ramírez, S. M., Slatina, S., Sewankambo, N. K., Sikira, H., Uribe, M. & Bird, V. J. (2019). Resource-oriented interventions for patients with severe mental illnesses in low- and middle-income countries: trials in Bosnia-Herzegovina, Colombia and Uganda. *BMC Psychiatry*, 19, 181. <https://doi.org/10.1186/s12888-019-2148-x>

### Evidence of the quality of the research

- [EQR. 1] Priebe, S. (2002-2006). Towards More Effective European Community Care for Patients with Severe Psychosis [QLRT-2000-01938]. *European Commission Research Directorate*. EUR1,200,000.
- [EQR. 2] Priebe, S. (2010-2015). Effective patient-clinician interaction to improve treatment outcomes for patients with psychosis [RP-PG-0108-10023]. *National Institute for Health Research*. Programme Grant for Applied Research. GBP1,040,291.

[EQR. 3] Bird, V. Priebe, S. (2018-2021). Making routine meetings with patients therapeutically effective [MRC&U0033]. *Barts Charity*. Large grant doctoral award. GBP101,988.

[EQR. 4] Priebe, S. (2017-2021). Global Health Research Group on developing psycho-social interventions [16/137/97]. *National Institute for Health Research*. Global Health Research. GBP1,990,178.

#### **4. Details of the impact** (indicative maximum 750 words)

DIALOG+, developed by Queen Mary's Profs Priebe and Healey, turns routine patient-clinician meetings in mental healthcare into therapeutically effective interventions. In 2016, it was shortlisted for the Health Service Journal national 'clinical research impact' award. The award recognises research with a substantial impact on actual patient care in the NHS.

#### **Changing clinical guidelines: DIALOG is now recommended as the outcome measure used by all early intervention in psychosis (EIP) services nationally**

In 2018, The Royal College of Psychiatrists' College Centre for Quality Improvement (CCQI) developed a comprehensive set of standards for EIP, incorporating key standards on access, waiting times and NICE-recommended treatment. This framework sets out how progress should be measured and provides the detail by which EIP services will be evaluated [5.1]. The access and waiting time standard for EIP recommends DIALOG+ as one of three outcome tools "chosen because they have been well-researched and cover a wide range of relevant outcomes while being brief and practical to use in routine clinical settings" [5.2]. The Five Year Forward View for Mental Health [5.3] also encourages local health authorities to "align their framework with outcomes linked to specific mental health conditions or pathways of care" and recommends the DIALOG scale for measuring clinical effectiveness. DIALOG has recently been included in the NHS Outcomes Programme 2019-2020 as a core reporting standard for EIP services [5.4]. Finally, in 2019, the Welsh National Clinical Audit of Psychosis, commissioned by the Healthcare Quality Improvement Partnership as part of the National Clinical Audit and Patient Outcomes Programme, recommended that quality improvement leads should work with EIP teams to "develop ways to use DIALOG outcome data to monitor and improve the quality of care they deliver to people with early psychosis" [5.5].

#### **Uptake into routine clinical practice**

Although the intervention was published only in 2015, its app version is freely available in the App Store and Google Play Store for different platforms, including smart phones and in >17 languages [5.6]. The app has been downloaded over 700 times and has been used in over 5,000 sessions (note that downloads are by care teams, therefore, numbers are not comparable with mass-market apps for individuals). The app also provides comparisons with previous ratings, explanations for each of the four steps, and the full manual for DIALOG+. The next generation of the app is fully integrated with the clinical records system RiO, providing a step change in the way care planning meetings are conducted.

DIALOG+ has been taken up regionally (East London NHS Foundation Trust (ELFT) for all secondary services with >8,000 patients at any time [5.7] across London, Luton and Bedfordshire, Norfolk and Suffolk) and nationally across all health boards in Wales (~600 patients). As of June 2019, a service evaluation indicated that more than 18,000 DIALOG+ sessions had been completed, with over 7,700 patients in East London alone. The intervention is now recommended for all patients in London's secondary mental health services, which has resulted in substantial improvements to quality of life for >100,000 patients. Nationally the scale component of the intervention is recommended for evaluation in all EIP services, currently >18,600 patients, and internationally (as a core principle of establishing community mental health care in several low and middle-income countries), with the potential to improve the quality of life of millions of patients worldwide. To support wider intervention uptake, the Healthy Partnerships London website, which features all of the DIALOG+ tools used in routine mental health care including videos and training materials, was launched October 10th 2019 [5.8]. The intervention has been implemented and/or tested in >18 countries.

#### **Improving patient mental health and quality of life**

Using DIALOG+ in routine monthly meetings over a six-month period [3.4]:

- Improves patients' quality of life (with effect size at least as large as specialised interventions such as cognitive behavioural therapy)
- Reduces symptoms
- Has better outcomes for independent living, work and social relationships.

The changes (measured using the Manchester Short Assessment of Quality of Life) highlight subjective patient-rated improvements in areas such as physical health, job situation and relationships with family and friends. Improvements are also apparent in objective social living parameters, such as living situation (independent, sheltered), employment (full/part time paid employment, voluntary) and friendships (having a close friend).

A service evaluation conducted in June 2019 on the routine use of DIALOG+ within ELFT indicated consistent improvements in quality of life. Analysing data from over 7,700 patients, all diagnostic groups, and across all different service types (inpatient, community recovery, perinatal, forensic) found that there were sustained improvements and that these were apparent for satisfaction with life domains, and treatment.

### Improving health economics

Using DIALOG+ is not only cost-effective, but also reduces costs of care. The cost savings over a one-year period are approximately GBP1,300 per patient [5.9], which amounts to approximately GBP10,400,000 every year in the East London NHS Foundation Trust alone.

### 5. Sources to corroborate the impact (indicative maximum of 10 references)

[5.1] Royal College of Psychiatrists. (2018). *Standards for Early Intervention in Psychosis Services*. [https://www.rcpsych.ac.uk/docs/default-source/improving-care/ccqi/quality-networks/early-intervention-in-psychosis-teams-\(eipn\)/epin-standards-first-edition.pdf?sfvrsn=fd9b4a0f\\_2](https://www.rcpsych.ac.uk/docs/default-source/improving-care/ccqi/quality-networks/early-intervention-in-psychosis-teams-(eipn)/epin-standards-first-edition.pdf?sfvrsn=fd9b4a0f_2)

[5.2] NICE. (2016). *Implementing the Early Intervention in Psychosis Access and Waiting Time Standard: Guidance*. <https://www.nice.org.uk/guidance/qs80/resources/implementing-the-early-intervention-in-psychosis-access-and-waiting-time-standard-guidance-2487749725>

[5.3] NHS England and NHS Improvement (2016). *Delivering the Five Year Forward View for Mental Health: Developing quality and outcomes measures*. <https://www.england.nhs.uk/mentalhealth/wp-content/uploads/sites/29/2016/02/mh-quality-outcome.pdf>

[5.4] Notes of the NHS E / NHS Digital Outcomes meeting (27th February 2017, page 3).

[5.5] National Clinical Audit of Psychosis. Early Intervention in Psychosis Audit. *National report for Wales*. <https://www.hqip.org.uk/resource/national-clinical-audit-of-psychosis-early-intervention-in-psychosis-2019-2020-wales-report/#.X7JcDGj7SUK>

[5.6] East London NHS Foundation Trust. *Dialog+*. <https://dialog.elft.nhs.uk/Home>. Accessed 16 November 2020.

[5.7] F. Rohricht. Consultant Psychiatrist and Medical Director. *East London NHS Foundation Trust* (testimonial letter, 24 October 2018).

[5.8] Healthy London Partnership. *DIALOG*. <https://www.healthylondon.org/resource/dialog/>. Accessed 16 November 2020.

[5.9] Priebe, P., Golden, E., Kingdon, D., Omer, S., Walsh, S., Katevas, K., McCrone, P., Eldridge, S. & McCabe, R. (2017). Effective patient–clinician interaction to improve treatment outcomes for patients with psychosis: a mixed-methods design. *Programme Grants for Applied Research*, 5 (6). <https://doi.org/10.3310/pgfar05060>