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**Title:** Integrated care services supported by information and communication technologies (ICS-ICT) generate efficiencies in healthcare: The NEXES project

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**Body:** We hypothesized that deployment of ICS-ICT aiming at transferring complexity from hospital to community-based services is cornerstone to face the challenge of chronic conditions. Objectives and Method: To assess deployment of 4 patient-centred ICS-ICT in 3 European sites, addressing COPD, cardiac disorders and type II diabetes: i) Wellness and Rehabilitation (W&R, n=421); ii) Enhanced Care for frail patients (EC, n=1,340); iii) Home Hospitalization (HH, n=2,454) and; iv) Remote support for diagnosis in primary care (Support, n=7,000) combining different study designs. Two different ICT approaches: Health Information Exchange (ELIN®) and Health Information Sharing (Linkcare®) were compared. The Model for ASsessment of Telemedicine applications (MAST) was used for evaluation. Results: Efficacy,

complementariness and high degree of transferability were proven for all ICS-ICT. Organizational factors appeared as major modulators of NEXES' outcomes. HI-Sharing showed high potential for scalability of ICS-ICT. Ethical and legal barriers were identified. Conclusions: ICS-ICT showed potential to generate efficiencies. Deployment strategies shall adapt to site specificities. Sustainability is strongly dependent on the contextual business plans encompassing all stakeholders. Reimbursement based on bundle payments and shared risks between payers(s) and healthcare providers are suggested. The business model relies on the potential of ICS-ICT to generate efficiencies, thus facilitating innovation with no further increases in total health costs. Supported by NEXES (EU Grant CIP-ICT-PSP-2007-225025) and PITES (FIS-PI09/90634).