Detta är ett svar från SBU:s Upplysningstjänst 2016-05-27. SBU:s Upplysningstjänst svarar på avgränsade medicinska frågor. Svaret bygger inte på en systematisk litteraturöversikt, varför resultaten av litteratursökningen kan vara ofullständiga. Kvaliteten på ingående studier har inte bedömts. Detta svar har tagits fram av SBU:s kansli och har inte granskats av SBU:s råd eller nämnd.

Kontinuerlig subkutan glukosmätning vid diabetes

God kontroll av blodglukosnivån vid diabetes är viktig för att undvika följdsjukdomar. Blodglukos kan mätas av patienten själv med teststickor (self monitoring of blood glucose, SMBG) eller kontinuerligt via en subkutan sensor (kontinuerlig subkutan glukosmätning, CGM). SBU utvärderade år 2013 nytta och risk av behandling med kontinuerlig glukosmätning utan eller med insulinpump (SAP) jämfört med sedvanlig mätning vid diabetes hos barn, ungdomar och vuxna.

Fråga:
Har det sedan SBUs rapport 2013 tillkommit studier som undersöker effekten av kontinuerlig blodglukosmätning jämfört med sedvanlig mätning vid diabetes?

Sammanfattning

Upplysningstjänsten har identifierat tre systematiska översikter, fyra randomiserade kontrollerade studier (RCT), tre observationsstudier och tre hälsoekonomiska studier publicerade efter SBUs rapport från 2013. SBU har inte tagit ställning i sakfrågan utan redovisar endast de enskilda författarnas slutsatser.

De systematiska översikterna skiljer sig avseende undersökt population och redovisade utfallsmått. Patientgrupper som inkluderas i översikterna är gravida kvinnor med diabetes typ 1 och 2, tonåringar med typ 1 diabetes och vuxna med diabetes typ 2. Två av översikterna visar ingen signifikant skillnad mellan CGM och SMBG på respektive utfallsmått. En översikt drar slutsatsen att CGM är mer effektivt än SMBG för att sänka HbA1c hos vuxna med diabetes typ 2.

Upplysningstjänsten identifierade fyra RCT:er utöver de som inkluderades i de systematiska översikterna. RCT:erna skiljer sig avseende population och utfallsmått. Två av studierna drar slutsatsen att användning av CGM är effektivare än SMBG för att upprätthålla glykoskontroll hos vuxna patienter med diabetes typ 1 och 2. En studie pekar på att SAP är ett effektivare verktyg än enbart insulinpump (CSII) +

SMBG för att reducera albuminuri hos vuxna patienter med typ 1 diabetes. En studie visar ingen signifikant skillnad mellan CGM och SMBG avseende HbA1C.

En observationsstudie följer upp patienter från en RCT under tre år efter att studien avslutats. Studien drar slutsatsen att SAP-behandling är effektivare än SMBG på att reducera Hba1C också efter tre års användning. En prospektiv fall-kohortstudie drar slutsatsen att användning av CGM ledde till bättre HbA1c hos barn med diabetes typ 1, dock var det en stor andel av deltagarna i CGM-kohorten som slutade använda sin CGM-apparat under studien. En annan prospektiv studie visar att CGM minskade svår hypoglykemi hos gravida kvinnor i högre utsträckning än SMBG.

De hälsoekonomiska studierna undersöker kostnadseffektiviteten av CGM jämfört med SMBG med kostnaden per vunnet kvalitetsjusterat levnadsår (QALYs) som utfallsmått. Alla inkluderade studier drar slutsatsen att CGM är kostnadseffektivt jämfört med SMBG.

Bakgrund

Diabetes karaktäriseras av hel eller delvis brist på insulin vilket leder till förhöjda nivåer av socker (glukos) i blodet. De vanligaste formerna av diabetes betecknas typ 1-diabetes respektive typ 2-diabetes. Förekomsten av diabetes i Sverige är cirka fyra procent, där typ 1-diabetes utgör 5-10 procent av all diabetes och typ 2-diabetes står för 80-90 procent.

God kontroll av blodglukosnivån är viktig för att undvika följdsjukdomar till diabetes. Blodglukosnivån påverkas av flera faktorer såsom diabetesläkemedel, kostintag och fysisk aktivitet och den behöver utvärderas både kort och långsiktigt. Den långsiktiga blodglukoskontrollen utvärderas genom bestämning av glykosylerat hemoglobin i blodet (HbA1c) med 2–3 månaders intervall. Både patient och vårdgivare behöver även information om blodglukoshalten flera gånger om dagen.

Blodglukos kan mätas av patienten själv med teststickor (SMBG) eller kontinuerligt via en subkutan sensor (CGM). Eftersom blodglukoshalten varierar under och mellan dygnen ger upprepade blodglukosbestämningar (systematisk testning) ett underlag för optimering av behandlingen.

Det finns idag flera produkter för kontinuerlig glukosmätning. Syftet är att patienten lättare ska ges möjlighet att upptäcka avvikelser i blodglukoshalten och därmed vidta åtgärder för att reglera ett högt respektive lågt glukosvärde. Kontinuerlig glukosmätning kan även kombineras med en insulinpump, vilket kallas sensor augmented pump therapy (SAP). Det finns SAP-behandling som också kombineras med en funktion där tillförseln av basalinsulin stängs av vid låga blodsockervärden (LGS=low glucose suspend). Det finns även insulinpumpar (CSII) som inte kombineras med kontinuerlig glukosmätning [1].

Avgränsningar

Vi har gjort sökningar (se avsnittet ”Litteratursökning”) i databaserna PubMed, Cochrane Library, PsycInfo, Cinahl och EMBASE. Vi har utfört en uppdaterad sökning utifrån SBUs rapport från 2013 och har till stor del använt samma sökstrategi och avgränsningar. Vi har dock tidsavgränsat sökningarna till artiklar publicerade efter år 2013 och valt att också inkludera observationsstudier med kontrollgrupp.

Resultat från sökningen

Upplysningstjänstens litteratursökning har totalt genererat 1007 träffar. Vi har läst alla sammanfattningar. Av dessa har 52 artiklar bedömts kunna vara relevanta och lästs i fulltext. I svaret ingår 13 artiklar. De artiklar som inte ingår i svaret har exkluderats på grund av att de inte var relevanta för frågeställningen. Observera att vi varken har bedömt kvaliteten på översikterna eller de ingående studierna. Det är sannolikt att flera av studierna kan ha lägre kvalitet än vad SBU inkluderar i sina ordinarie utvärderingar.

Systematiska översikter

Upplysningstjänsten har identifierat tre systematiska översikter (tabell 1). Översikterna varierar något avseende inklusions- och exklusionskriterier. De skiljer sig också avseende undersökt population. Patientgrupper som inkluderas i översikterna är gravida kvinnor med diabetes typ 1 och 2, tonåringar med typ 1 diabetes och vuxna med diabetes typ 2. Gallring och granskning av artiklar har utförts av två oberoende personer och kvalitetsbedömning av de ingående studierna har gjorts i översikterna. Översikterna inkluderar endast randomiserade kontrollerade studier. Sammanfattningsvis hittar två av översikterna ingen signifikant skillnad mellan CGM och SMBG på respektive utfallsmått för gravida kvinnor och ungdomar. En översikt kommer fram till att CGM är mer effektivt än SMBG för att sänka HbA_{1c} hos vuxna med diabetes typ 2.

Tabell 1 Systematiska översikter

Inkluderade studier	Population	Utfallsmått
Matsuda et al (2014) [2]		
Randomiserade kontrollerade studier: 2	Tonåringar mellan 12-18 år med diabetes typ 1 och behandlade med CSII (N=85)	HbA_{1c}
Författarens slutsatser: “Based upon the small number of studies in this review, the utilization of CGM in conjunction with a CSII does not appear to improve hemoglobin A_{1C} levels in adolescents. There was limited evidence to inform the optimal method of blood glucose measurement to reduce episodes of hypoglycemia.”		

Moy et al (2014) [3]		
Randomiserade kontrollerade studier: 2	Gravida kvinnor med diabetes typ 1 och 2 (N=225) RT-CGM användes i en studie och i den andra framgår inte typ av CGM.	**Primära utfallsmått:** Glykemisk kontroll Spädbarnets födelsevikt **Sekundära utfallsmått:** Kejsarsnitt Gestationsålder Neonatal hypoglykemi Prematura barn Missfall Stora missbildningar
Författarens slutsatser: "In this review, neither pooled analysis nor individual trial analysis showed any significant advantages of one monitoring technique above the other."		
Poolsup et al (2013) [4]		
Randomiserade kontrollerade studier: 14	Barn under 18 år med diabetes typ 1 (N=817) Vuxna över 18 år med diabetes typ 2 (N=228) r-CGM användes i 5 studier och RT-CGM användes i 5 studier.	**Primära utfallsmått:** HbA_{1c}
Författarens slutsatser: "The available evidence from this meta-analysis suggests that CGM use was no more effective than SMBG in reducing HbA1c in type 1 diabetic pediatrics. However, the results of subgroup analyses showed that RT-CGM can be more effective than SMBG in reducing HbA1c. In contrast, r-CGM was no better than SMBG in T1DM pediatric population. Therefore, RT-CGM devices can be an effective tool in Type 1 diabetic pediatrics population. Our results suggest that the effect of CGM use in lowering HbA1c level was superior to SMBG for type 2 diabetes adults. Since the average baseline HbA1c of participants from all studies was above 8%, CGM device can be an effective tool in patients with uncontrolled T2DM."		

CSII= Insulinpump
r-CGM= Retrospektiv kontinuerlig subkutan glukosmätning
RT-CGM= Kontinuerlig subkutan glukosmätning i realtid

Randomiserade kontrollerade studier

Upplysningstjänsten identifierade fyra randomiserade kontrollerade studier utöver de som inkluderades i de systematiska översikterna (tabell 2). RCT:erna skiljer sig avseende population och utfallsmått. Två av studierna drar slutsatsen att användning av CGM är effektivare än SMBG för att upprätthålla glukoskontroll hos vuxna patienter med diabetes typ 1 och 2. En studie pekar på att SAP är ett effektivare verktyg än enbart insulinpump (CSII) + SMBG för att reducera albuminuri hos vuxna patienter med typ 1 diabetes. En studie visar ingen signifikant skillnad mellan CGM och SMBG avseende HbA_{1C}.

Tabell 2 Identifierade RCT:er

Population	Intervention/kontroll	Utfallsmått
New et al (2015) [5]		
Personer med diabetes typ 1 och 2 (N=160) (Bortfall 31 personer)	100 dagar CGM med larm CGM utan larm SMBG	Blodglukos inom normalvärde HbA_{1c} Livskvalitet
Författarens slutsatser: "this study shows that using CGM with or without alarms reduces patients' time spent outside glucose targets compared with conventional SMBG. This was especially evident for patients who are on CSII therapy. Although no difference in HbA_{1c} reduction was seen among the three groups because of the limited follow-up, clinically meaningful HbA_{1c} reduction was more frequent for individuals in the CGM groups. In addition, participants in the CMG groups spent less time in hypoglycemia and experienced less variability in glucose levels than those in the SMBG group"		
Rosenlund et al (2015) [6]		
Vuxna med diabetes typ 1 och med tidigare protein i urinen (N=60) (Bortfall 5 personer)	1 år SAP CSII och SMBG	Albuminuria
Författarens slutsatser: "SAP treatment reduced UACR on stable RAS inhibition. Significance was reached after adjustment for HbA_{1c}. Treatment with SAP reduced glucose variability and HbA_{1c} and might have a beneficial effect on diabetic nephropathy."		

Sequiera et al (2013) [7]		
Personer över 18 år med diabetes typ 1 (N=39) (Bortfall 14 personer)	28 veckor Grupp A använde CGM Grupp B utförde SMBG Efter 28 veckor bytte grupperna intervention.	HbA_{1c} Patienttillfredställelse
Författarens slutsatser: "No significant reduction in HbA1c or decrease in time spent in parameters of low and high blood glucose was shown. However, eighty percent of participants who completed the study wanted to continue to use CGM once the research study was over. The participants also felt that the CGM made adjusting insulin easier."		
Tumminia et al (2015) [8]		
Vuxna personer med diabetes typ 1 och dålig glukoskontroll (N=20) (Bortfall 6 personer)	6 månader RT-CGM CSII och SMBG	Glykemisk kontroll
Författarens slutsatser: "Appropriate use of real-time continuous glucose monitoring improved glycometabolic control in T1D patients. The effects of continuous glucose monitoring were more evident in patients under multiple daily insulin treatment, compared with insulin pump therapy. Glucose variability, in addition to glycaemic control, was improved in compliant diabetic patients."		

CSII= Insulinpump
CGM= Kontinuerlig subkutan glukosmätning
RT-CGM= Kontinuerlig subkutan glukosmätning i realtid
SAP= Insulinpump kombinerat med kontinuerlig subkutan blodglukosmätning
SMBG= Egenmätning av blodglukos med teststickor
UACR= U-albumin–kreatininindex

Observationsstudier

Vi identifierade tre stycken observationsstudier (tabell 3). Två prospektiva och en retrospektiv studie. Studierna skiljer sig med avseende på population, utfallsmått och studielängd.

Tabell 3 Observationsstudier

Studiedesign	Population	Intervention/kontroll	Utfallsmått
Secher et al (2014) [9]			
Prospektiv studie	Gravida kvinnor med diabetes typ 1 och känd hypoglykemi innan graviditet (N=28)	4 månader RT-CGB (N=12) SMBG (N=16)	Svår hypoglykemi
Författarens slutsatser: "Among 28 women with a recent history of severe hypoglycaemia, 12 (43%) used real-time continuous glucose monitoring from a median (range) of 10 (7–13) gestational weeks for 10 (1–32) weeks. Among these 12 women, eight had experienced a total of 34 (range 1–11) severe hypoglycaemic events in the year before pregnancy and nine had experienced 23 (range 1–10) events early in pregnancy. After initiation of real-time continuous glucose monitoring, two (17%) women experienced one event each. The incidence rates of severe hypoglycaemia were 2.8, 17.5 and 0.3 events/patient-year. Among the 16 women in the high risk group not using real-time continuous glucose monitoring, the corresponding figures were 1.6, 5.0 and 0.1 events/patient-year."			
Quiros et al (2015) [10]			
Retrospektiv studie	Vuxna med diabetes typ 1 (=20)	3 år SAP (N=6) CSII med SMBG (N=14)	HbA_{1c}
Författarens slutsatser: "Our study suggests that the additional benefit of SAP therapy achieved in a clinical trial may persist in the long term in routine clinical care of patients with T1DM."			
Rachmiel et al (2015) [11]			
Prospektiv fall-kontroll-studie	Barn med diabetes typ 1 (=149)	12 månader RT-CGM SMBG	Glukoskontroll
Författarens slutsatser: "this study showed that RT-CGMS in clinical practice are of value in improving glycemic control, but only among those who comply to its continuous usage. Despite the possible benefits of RT-CGMS, adoption of this technology in clinical practice was low, even in a setting in which funding was not an obstacle."			

CSII= Insulinpump
RT-CGM= Kontinuerlig subkutan glukosmätning i realtid
SAP= Insulinpump kombinerat med kontinuerlig subkutan blodglukosmätning
SMBG= Egenmätning av blodglukos med teststickor

Hälsoekonomiska studier

Vi har identifierat tre hälsoekonomiska studier (tabell 4). Studierna är baserade på beslutsmodeller och använder modellen IMS Diabetes Model. Alla studierna är kostnadsnyttoanalyser med utfallsmåttet kostnad per vunnet QALY.

Tabell 4 Hälsoekonomiska studier

Studiedesign	Analysmetod	Intervention/kontroll	Utfallsmått
Fonda et al (2016) USA [12]			
Kostnadsnyttoanalys	Modellen *IMS CORE Diabetes Model* Data från en RCT [13] Livstidsperspektiv Direkta hälso- och sjukvårdskostnader	RT-CGM SMBG	Livstidskostnad per patient Kostnad per vunnet QALY
Författarens slutsatser: "RT-CGM, as a self-care tool, is a cost-effective disease management option in the US for people with type 2 diabetes not on prandial insulin. Repeated use of RT-CGM may result in additional cost-effectiveness."			
Roze et al (2015) England [14]			
Kostnadsnyttoanalys	Modellen IMS CORE Diabetes Model Data från en meta-analys [15] Livstidsperspektiv Direkta hälso- och sjukvårdskostnader	SAP +LGS CSII + SMBG	Kostnad per vunnet QALY
Författarens slutsatser: "For UK-based type 1 diabetes patients with poor glycemic control, the use of SAP plus LGS is likely to be cost effective compared with CSII plus SMBG."			
Roze et al (2015) Sverige [16]			
Kostnadsnyttoanalys	Modellen IMS CORE Diabetes Model Data från en metaanalys [15] Livstidsperspektiv Direkta och indirekta kostnader ur ett samhällsperspektiv	SAP CSII + SMBG	Kostnad per vunnet QALY

Författarens slutsatser:

"Use of the sensor-augmented pump was associated with an incremental cost–effectiveness ratio of 367,571 SEK per quality–adjusted life year gained, which is likely to represent good value for money in the treatment of Type 1 diabetes in Sweden"

CSII= Insulinpump
LGS= En SAP som kan stänga av tillförsel av basalinsulin vid låga glukosvärden
RT-CGM= Kontinuerlig subkutan glukosmätning i realtid
SAP= Insulinpump kombinerat med kontinuerlig subkutan blodglukosmätning
SMBG= Egenmätning av blodglukos med teststickor
QALY= Kvalitetsjusterat levnadsår

Projektgrupp

Detta svar är sammanställt av Isabella Pistone, Jessica Dagerhamn, Jenny Stenman och Jan Liliemark.

Litteratursökning

PubMed via NLM 2016-02-19 **Population: Barn under förskoleålder**		
	Search terms	**Items found**
Population: Foster		
1.	"Infant"[Mesh] OR infant*[tiab] OR toddler*[tiab] OR newborn*[tiab] OR neonat*[tiab]	1206757
Intervention: Insulinpump eller CBGM		
2.	(insulin pump*[tiab] OR insulin infusion pump*[tiab] OR implantable pump*[tiab] OR implanted pump*[tiab] OR "continuous subcutaneous insulin infusion"[tiab] OR "continuous subcutaneous insulin infusions"[tiab] OR CSII[tiab] OR ((Infusion Pumps[mesh] OR infusion pump*[tiab] OR pump therapy[tiab]) AND ("Insulin"[Mesh] OR Insulin*[tiab])) OR sensor-augmented pump*[tiab] OR patch pump*[tiab] OR "Insulin Infusion Systems"[Mesh] OR omnipod*[tiab] OR accu-check*[tiab] OR accucheck*[tiab] OR accuchek*[tiab] OR dana[tiab] OR animas*[tiab] OR (Paradigm*[tiab] AND Medtronic[tiab]) OR ("Monitoring, Ambulatory"[Mesh:NoExp] AND "Blood Glucose"[Mesh]) OR "continuous glucose monitoring"[tiab] OR "continuous glucose monitor"[tiab] OR "continuous blood glucose monitoring"[tiab] OR "cgm"[Title/Abstract] OR "cgms"[Title/Abstract] OR "Guardian RT"[Title/Abstract] OR "Freestyle Navigator"[tiab])	9350
Study types: Systematiska översikter, RCT, Observationsstudier		
3.	("Meta-Analysis" [Publication Type] OR "Meta-Analysis as Topic"[Mesh] OR meta analy*[tiab] OR metaanaly*[tiab] OR metanaly*[tiab] OR systematic review*[tiab] OR systematic overview*[tiab] OR "systematic literature"[tiab] OR Pubmed[tiab] OR cochrane[tiab] OR medline[tiab] OR embase[tiab] OR psychlit[tiab] OR psyclit[tiab] OR psychinfo[tiab] OR psycinfo[tiab] OR cinahl[tiab] OR cinhal[tiab] OR reference list*[tiab] OR bibliograph*[tiab] OR hand-search*[tiab] OR "relevant journals"[tiab] OR manual search*[tiab] OR (("selection criteria"[tiab] OR "data extraction"[tiab]) AND "review"[Publication Type]) OR "Randomized Controlled Trials as Topic"[Mesh] OR "Randomized Controlled Trial" [Publication Type] OR "Random Allocation"[Mesh] OR "Double-Blind Method"[Mesh] OR "Single-Blind Method"[Mesh] OR "Clinical Trial" [Publication Type] OR "Clinical Trials as Topic"[Mesh] OR Random*[tiab] OR RCT*[tiab] OR Clinical trial*[tiab] OR "Placebos"[Mesh] OR placebo*[tiab] OR single blind*[tiab] OR double blind*[tiab] OR single mask*[tiab] OR double mask*[tiab] OR "Cohort Studies"[Mesh] OR cohort*[tiab] OR observational*[tiab] OR "follow up"[tiab] OR "longitudinal"[tiab] OR "retrospective"[tiab] OR prospective[tiab])	3559034
4.	(comment[Publication Type] OR "Editorial" [Publication Type] OR "Letter" [Publication Type] OR "Case Reports" [Publication Type] OR "Historical Article" [Publication Type])	3378638
Limits:		
5.	Filters: Publication date from 2012/10/24; English; Danish; German; Norwegian; Swedish	
Final	((1 AND 2 AND 3) NOT 4) AND 5	58

PubMed via NLM 2016-02-19 **Population barn, ungdomar och gravida**		
	Search terms	**Items found**
Population: Barn och ungdomar med diabetes och gravida		
1.	"Diabetes Mellitus"[Mesh:NoExp] OR "diabetes mellitus"[Title/Abstract] OR "Diabetes Mellitus, Type 1"[Mesh] OR IDDM[tiab] OR T1DM[tiab] OR T1D[tiab] OR ((diabet*[tiab] or dm[tiab]) AND (insulindepend*[tiab] or insulin-depend*[tiab] or juvenile onset[tiab] or sudden onset[tiab] or brittle[tiab] or ketosis prone[tiab] or autoimmune[tiab])) OR ((diabet*[tiab] or dm[tiab]) AND ("type 1"[tiab] or "type I"[tiab] or "type1"[tiab] or "typeI"[tiab])) OR "Diabetes Mellitus, Type 2"[Mesh] OR ((diabet*[tiab] or dm[tiab]) AND ("type 2"[tiab] or "type II"[tiab] or "type2"[tiab] or "typeII"[tiab])) OR T2DM[tiab] OR T2D[tiab] OR MODY[tiab] OR NIDDM[tiab] OR ((diabet*[tiab] or dm[tiab]) AND ("non insulin dependent"[tiab] or "noninsulin dependent"[tiab] or Maturity Onset[tiab] or Adult Onset[tiab] or Slow-Onset[tiab] or stable[tiab] or ketosis resistant[tiab])) OR "latent autoimmune diabetes"[tiab] OR LADA[tiab]	67017
Intervention: insulinpump eller CBGM		
2.	insulin pump*[tiab] OR insulin infusion pump*[tiab] OR implantable pump*[tiab] OR implanted pump*[tiab] OR "continuous subcutaneous insulin infusion"[tiab] OR "continuous subcutaneous insulin infusions"[tiab] OR CSII[tiab] OR ((Infusion Pumps[mesh] OR infusion pump*[tiab] OR pump therapy[tiab]) AND ("Insulin"[Mesh] OR Insulin*[tiab])) OR sensor-augmented pump*[tiab] OR patch pump*[tiab] OR "Insulin Infusion Systems"[Mesh] OR omnipod*[tiab] OR accu-check*[tiab] OR accucheck*[tiab] OR accuchek*[tiab] OR dana[tiab] OR animas*[tiab] OR (Paradigm*[tiab] AND Medtronic[tiab]) OR ("Monitoring, Ambulatory"[Mesh:NoExp] AND "Blood Glucose"[Mesh]) OR "continuous glucose monitoring"[tiab] OR "continuous glucose monitor"[tiab] OR "continuous blood glucose monitoring"[tiab] OR "cgm"[Title/Abstract] OR "cgms"[Title/Abstract] OR "Guardian RT"[Title/Abstract] OR "Freestyle Navigator"[tiab]	2010
Study types: Systematiska översikter, RCT, observationsstudier		
3.	"Meta-Analysis" [Publication Type] OR "Meta-Analysis as Topic"[Mesh] OR meta analy*[tiab] OR metaanaly*[tiab] OR metanaly*[tiab] OR systematic review*[tiab] OR systematic overview*[tiab] OR "systematic literature"[tiab] OR Pubmed[tiab] OR cochrane[tiab] OR medline[tiab] OR embase[tiab] OR psychlit[tiab] OR psyclit[tiab] OR psychinfo[tiab] OR psycinfo[tiab] OR cinahl[tiab] OR cinhal[tiab] OR reference list*[tiab] OR bibliograph*[tiab] OR hand-search*[tiab] OR "relevant journals"[tiab] OR manual search*[tiab] OR (("selection criteria"[tiab] OR "data extraction"[tiab]) AND "review"[Publication Type]) OR "Randomized Controlled Trials as Topic"[Mesh] OR "Randomized Controlled Trial" [Publication Type] OR "Random Allocation"[Mesh] OR "Double-Blind Method"[Mesh] OR "Single-Blind Method"[Mesh] OR "Clinical Trial" [Publication Type] OR "Clinical Trials as Topic"[Mesh] OR Random*[tiab] OR RCT*[tiab] OR Clinical trial*[tiab] OR "Placebos"[Mesh] OR placebo*[tiab] OR single blind*[tiab] OR double blind*[tiab] OR single mask*[tiab] OR double mask*[tiab] OR "Cohort Studies"[Mesh] OR cohort*[tiab] OR observational*[tiab] OR "follow up"[tiab] OR "longitudinal"[tiab] OR "retrospective"[tiab] OR prospective[tiab]	749821

Limits:		
4.	"young children"[Title/Abstract] OR toddler*[Title/Abstract] OR preschool*[Title/Abstract] OR pre-school*[Title/Abstract] OR "Child, Preschool"[Mesh] OR Kindergarten*[tiab]	75962
5.	"Child"[Mesh:NoExp] OR "adolescent"[MeSH Terms] OR child*[tiab] OR adolescen*[tiab] OR juvenile*[tiab] OR pediatric*[tiab] OR teen*[tiab] OR young*[tiab] OR youth*[Title/Abstract] OR school*[tiab]	426767
6.	1 AND "Pregnancy"[Mesh:NoExp] OR "Pregnancy in Diabetics"[Mesh] OR pregnan*[tiab]	3172
7.	Filters: Publication date from 2012/10/24; English; Danish; German; Norwegian; Swedish	
Combined sets:		
8.	1 AND 2 AND 3 AND 4 AND 7	53
9.	1 AND 2 AND 3 AND 5 AND 7	241
10.	1 AND 2 AND 3 AND 6 AND 7	35
Final		329

PubMed via NLM 2016-02-19 **Population Vuxna med diabetes**		
	Search terms	**Items found**
Population: Vuxna med diabetes		
1.	"Diabetes Mellitus"[Mesh:NoExp] OR "diabetes mellitus"[Title/Abstract] OR "Diabetes Mellitus, Type 1"[Mesh] OR IDDM[tiab] OR T1DM[tiab] OR T1D[tiab] OR ((diabet*[tiab] or dm[tiab]) AND (insulindepend*[tiab] or insulin-depend*[tiab] or juvenile onset[tiab] or sudden onset[tiab] or brittle[tiab] or ketosis prone[tiab] or autoimmune[tiab])) OR ((diabet*[tiab] or dm[tiab]) AND ("type 1"[tiab] or "type I"[tiab] or "type1"[tiab] or "typeI"[tiab])) OR "Diabetes Mellitus, Type 2"[Mesh] OR ((diabet*[tiab] or dm[tiab]) AND ("type 2"[tiab] or "type II"[tiab] or "type2"[tiab] or "typeII"[tiab])) OR T2DM[tiab] OR T2D[tiab] OR MODY[tiab] OR NIDDM[tiab] OR ((diabet*[tiab] or dm[tiab]) AND ("non insulin dependent"[tiab] or "noninsulin dependent"[tiab] or Maturity Onset[tiab] or Adult Onset[tiab] or Slow-Onset[tiab] or stable[tiab] or ketosis resistant[tiab])) OR "latent autoimmune diabetes"[tiab] OR LADA[tiab]	67017
Intervention: CBGM		
2.	("Monitoring, Ambulatory"[Mesh:NoExp] AND "Blood Glucose"[Mesh]) OR "continuous glucose monitoring"[tiab] OR "continuous glucose monitor"[tiab] OR "continuous blood glucose monitoring"[tiab] OR "cgm"[Title/Abstract] OR "cgms"[Title/Abstract] OR "Guardian RT"[Title/Abstract] OR "Freestyle Navigator"[tiab]	1050

Study types:		
3.	"Meta-Analysis" [Publication Type] OR "Meta-Analysis as Topic"[Mesh] OR meta analy*[tiab] OR metaanaly*[tiab] OR metanaly*[tiab] OR systematic review*[tiab] OR systematic overview*[tiab] OR "systematic literature"[tiab] OR Pubmed[tiab] OR cochrane[tiab] OR medline[tiab] OR embase[tiab] OR psychlit[tiab] OR psyclit[tiab] OR psychinfo[tiab] OR psycinfo[tiab] OR cinahl[tiab] OR cinhal[tiab] OR reference list*[tiab] OR bibliograph*[tiab] OR hand-search*[tiab] OR "relevant journals"[tiab] OR manual search*[tiab] OR (("selection criteria"[tiab] OR "data extraction"[tiab]) AND "review"[Publication Type]) OR "Randomized Controlled Trials as Topic"[Mesh] OR "Randomized Controlled Trial" [Publication Type] OR "Random Allocation"[Mesh] OR "Double-Blind Method"[Mesh] OR "Single-Blind Method"[Mesh] OR "Clinical Trial" [Publication Type] OR "Clinical Trials as Topic"[Mesh] OR Random*[tiab] OR RCT*[tiab] OR Clinical trial*[tiab] OR "Placebos"[Mesh] OR placebo*[tiab] OR single blind*[tiab] OR double blind*[tiab] OR single mask*[tiab] OR double mask*[tiab] OR "Cohort Studies"[Mesh] OR cohort*[tiab] OR observational*[tiab] OR "follow up"[tiab] OR "longitudinal"[tiab] OR "retrospective"[tiab] OR prospective[tiab]	749821
Limits:		
4.	Filters: Publication date from 2012/10/24; English; Danish; German; Norwegian; Swedish	
Final	1 AND 2 AND 3 AND 4	355

The search result, usually found at the end of the documentation, forms the list of abstracts

[MeSH] = Term from the Medline controlled vocabulary, including terms found below this term in the MeSH hierarchy
[MeSH:NoExp] = Does not include terms found below this term in the MeSH hierarchy
[MAJR] = MeSH Major Topic
[TIAB] = Title or abstract
[TI] = Title
[AU] = Author
[TW] = Text Word
Systematic[SB] = Filter for retrieving systematic reviews
* = Truncation
“ “ = Citation Marks; searches for an exact phrase

Cinahl 2016-02-19 **Population: Barn under förskoleålder**		
	Search terms	**Items found**
Intervention: Insulinpump eller CBGM		
1.	TI ((insulin N3 pump*) OR (implant* N3 pump*) OR "continuous subcutaneous insulin infusion*" OR CSII OR "sensor-augmented pump*" OR "patch pump*" OR omnipod* OR "accu-check*" OR accucheck* OR accuchek* OR dana OR animas* OR (Paradigm* N3 Medtronic) OR "continuous glucose monitor*" OR " continuous blood glucose monitor*" OR "cgm" OR "cgms" OR "Guardian RT" OR "Freestyle Navigator") OR AB ((insulin N3 pump*) OR (implant* N3 pump*) OR "continuous subcutaneous insulin infusion*" OR CSII OR "sensor-augmented pump*" OR "patch pump*" OR omnipod* OR "accu-check*" OR accucheck* OR accuchek* OR dana OR animas* OR (Paradigm* N3 Medtronic) OR "continuous glucose monitor*" OR "continuous blood glucose monitor*" OR "cgm" OR "cgms" OR "Guardian RT" OR "Freestyle Navigator") OR ((MH "Infusion Pumps" OR MH "Infusion Pumps, Implantable" OR TI (infusion N3 pump*) OR AB (infusion N3 pump*) OR TI "pump therapy" OR AB "pump therapy") AND (MH "Insulin" OR TI "Insulin*" OR AB "Insulin*")) OR MH "Insulin Infusion Systems"	324
Study types: systematiska översikter, RCT, observationsstudier		
2.	(PT systematic review OR PT meta analysis OR MH “Systematic Review” OR MH “Meta Analysis” OR TI(meta-analy* or metaanaly* or metanal*) OR AB (meta-analy* or metaanaly* or metanal*) OR TI(systematic w1 (review# or overview# or literature#)) OR AB(systematic w1 (review# or overview# or literature)) OR TI (pubmed OR cochrane OR medline OR embase OR psychlit OR psyclit OR psychinfo OR psycinfo OR cinahl OR cinhal) OR AB (pubmed OR cochrane OR medline OR embase OR psychlit OR psyclit OR psychinfo OR psycinfo OR cinahl OR cinhal) OR AB (reference W1 list*) OR AB bibliograph* OR AB (hand-search*) OR AB "relevant journals" OR AB (manual W1 search*) OR ((AB "selection criteria" OR AB "data extraction") AND PT review)) OR (PT Randomized Controlled Trial OR PT Clinical trial OR MH "Clinical Trials+" OR MH "Random Assignment" OR MH "Placebos" OR TI (random* OR RCT* OR (clinic* N3 trial*) OR placebo* OR ((singl* or doubl*) N1 (blind* or mask*))) OR AB (random* OR RCT* OR (clinic* N3 trial*) OR placebo* OR ((singl* or doubl*) N1 (blind* or mask*)))) OR (MH "Prospective Studies" OR MH "Correlational studies" OR MH "Nonconcurrent prospective studies" OR MH "Retrospective Design" OR MH "Observational Methods" OR TI (cohort* OR observational* OR "follow up" OR "longitudinal" OR "retrospective") OR AB (cohort* OR observational* OR "follow up" OR "longitudinal" OR "retrospective"))	99841
Limits:		
3.	MH "Infant" OR TI (infant* OR toddler* OR neonat* OR newborn*) OR AB (infant* OR toddler* OR neonat* OR newborn*)	12310
4.	Limiters - Published Date: 20121001-; Research Article; Language: Danish, English, German, Norwegian, Swedish	
Final	1 AND 2 AND 3 AND 4	17

Cinahl 2016-02-19 **Population: Barn, ungdomar och gravida**		
	Search terms	**Items found**
Population:		
1.	(MH "Diabetes Mellitus+" OR TX ("diabetes mellitus" OR IDDM OR T1DM OR T1D OR ((diabet* or dm) N3 (insulindepend* or insulin-depend* or "juvenile onset" or "sudden onset" or brittle or "ketosis prone" or autoimmune)) OR ((diabet* or dm) N3 ("type 1" or "type I" or "type1" or "typeI")) OR ((diabet* or dm) N3 ("type 2" or "type II" or "type2" or "typeII")) OR T2DM OR T2D OR MODY OR NIDDM OR ((diabet* or dm) N3 ("non insulin dependent" or "noninsulin dependent" or "Maturity Onset" or "Adult Onset" or "Slow-Onset" or stable or "ketosis resistant")) OR "latent autoimmune diabetes" OR LADA))	10546
Intervention:		
2.	TI ((insulin N3 pump*) OR (implant* N3 pump*) OR "continuous subcutaneous insulin infusion*" OR CSII OR "sensor-augmented pump*" OR "patch pump*" OR omnipod* OR "accu-check*" OR accucheck* OR accuchek* OR dana OR animas* OR (Paradigm* N3 Medtronic) OR "continuous glucose monitor*" OR "continuous blood glucose monitor*" OR "cgm" OR "cgms" OR "Guardian RT" OR "Freestyle Navigator") OR AB ((insulin N3 pump*) OR (implant* N3 pump*) OR "continuous subcutaneous insulin infusion*" OR CSII OR "sensor-augmented pump*" OR "patch pump*" OR omnipod* OR "accu-check*" OR accucheck* OR accuchek* OR dana OR animas* OR (Paradigm* N3 Medtronic) OR "continuous glucose monitor*" OR "continuous blood glucose monitor*" OR "cgm" OR "cgms" OR "Guardian RT" OR "Freestyle Navigator") OR ((MH "Infusion Pumps" OR MH "Infusion Pumps, Implantable" OR TI (infusion N3 pump*) OR AB (infusion N3 pump*) OR TI "pump therapy" OR AB "pump therapy") AND (MH "Insulin" OR TI "Insulin*" OR AB "Insulin*")) OR MH "Insulin Infusion Systems"	321
Study type:		
3.	(PT systematic review OR PT meta analysis OR MH “Systematic Review” OR MH “Meta Analysis” OR TI(meta-analy* or metaanaly* or metanal*) OR AB (meta-analy* or metaanaly* or metanal*) OR TI(systematic w1 (review# or overview# or literature#)) OR AB(systematic w1 (review# or overview# or literature)) OR TI (pubmed OR cochrane OR medline OR embase OR psychlit OR psyclit OR psychinfo OR psycinfo OR cinahl OR cinhal) OR AB (pubmed OR cochrane OR medline OR embase OR psychlit OR psyclit OR psychinfo OR psycinfo OR cinahl OR cinhal) OR AB (reference W1 list*) OR AB bibliograph* OR AB (hand-search*) OR AB "relevant journals" OR AB (manual W1 search*) OR ((AB "selection criteria" OR AB "data extraction") AND PT review)) OR (PT Randomized Controlled Trial OR PT Clinical trial OR MH "Clinical Trials+" OR MH "Random Assignment" OR MH "Placebos" OR TI (random* OR RCT* OR (clinic* N3 trial*) OR placebo* OR ((singl* or doubl*) N1 (blind* or mask*))) OR AB (random* OR RCT* OR (clinic* N3 trial*) OR placebo* OR ((singl* or doubl*) N1 (blind* or mask*)))) OR (MH "Prospective Studies" OR MH "Correlational studies" OR MH "Nonconcurrent prospective studies" OR MH "Retrospective Design" OR MH "Observational Methods" OR TI (cohort* OR observational* OR "follow up" OR "longitudinal" OR "retrospective") OR AB (cohort* OR observational* OR "follow up" OR "longitudinal" OR "retrospective"))	98095

Limits:		
4.	TX ("young children" OR toddler* OR preschool* OR pre-school* OR kindergarten*)	13458
5.	MH "Child" OR MH "adolescence" OR TX (child* OR adolescen* OR juvenile* OR pediatric* OR teen* OR young* OR youth* OR school*)	123513
6.	1 AND TX pregnan*	1193
7.	Limiters - Published Date: 20121001-; Research Article; Publication Type: Journal Article; Language: Danish, English, German, Norwegian, Swedish	
Combined sets:		
8.	1 AND 2 AND 3 AND 4 AND 7	14
9.	1 AND 2 AND 3 AND 5 AND 7	93
10.	1 AND 2 AND 3 AND 6 AND 7	15
Final		122

Cinahl 2016-02-19 **Population: Vuxna**		
	Search terms	**Items found**
Population:		
1.	(MH "Diabetes Mellitus+" OR TX ("diabetes mellitus" OR IDDM OR T1DM OR T1D OR ((diabet* or dm) N3 (insulindepend* or insulin-depend* or "juvenile onset" or "sudden onset" or brittle or "ketosis prone" or autoimmune)) OR ((diabet* or dm) N3 ("type 1" or "type I" or "type1" or "typeI")) OR ((diabet* or dm) N3 ("type 2" or "type II" or "type2" or "typeII")) OR T2DM OR T2D OR MODY OR NIDDM OR ((diabet* or dm) N3 ("non insulin dependent" or "noninsulin dependent" or "Maturity Onset" or "Adult Onset" or "Slow-Onset" or stable or "ketosis resistant")) OR "latent autoimmune diabetes" OR LADA))	21235
Intervention:		
2.	TI ("continuous glucose monitor*" OR "continuous blood glucose monitor*" OR "cgm" OR "cgms" OR "Guardian RT" OR "Freestyle Navigator") OR AB ("continuous glucose monitor*" OR "continuous blood glucose monitor*" OR "cgm" OR "cgms" OR "Guardian RT" OR "Freestyle Navigator")	245
Study type:		
3.	(PT systematic review OR PT meta analysis OR MH “Systematic Review” OR MH “Meta Analysis” OR TI(meta-analy* or metaanaly* or metanal*) OR AB (meta-analy* or metaanaly* or metanal*) OR TI(systematic w1 (review# or overview# or literature#)) OR AB(systematic w1 (review# or overview# or literature)) OR TI (pubmed OR cochrane OR medline OR embase OR psychlit OR psyclit OR psychinfo OR psycinfo OR cinahl OR cinhal) OR AB (pubmed OR cochrane OR medline OR embase OR psychlit OR psyclit OR psychinfo OR psycinfo OR cinahl OR cinhal) OR AB (reference W1 list*) OR AB bibliograph* OR AB (hand-search*) OR AB "relevant journals" OR AB (manual W1 search*) OR ((AB "selection criteria" OR AB "data extraction") AND PT review)) OR (PT Randomized Controlled Trial OR PT Clinical trial OR MH "Clinical Trials+" OR MH "Random Assignment" OR MH "Placebos" OR TI (random* OR RCT* OR (clinic* N3 trial*) OR placebo* OR ((singl* or doubl*) N1 (blind* or mask*))) OR AB	120945

Cinahl 2016-02-19 **Population: Vuxna**		
	(random* OR RCT* OR (clinic* N3 trial*) OR placebo* OR ((singl* or doubl*) N1 (blind* or mask*)))) OR (MH "Prospective Studies" OR MH "Correlational studies" OR MH "Nonconcurrent prospective studies" OR MH "Retrospective Design" OR MH "Observational Methods" OR TI (cohort* OR observational* OR "follow up" OR "longitudinal" OR "retrospective") OR AB (cohort* OR observational* OR "follow up" OR "longitudinal" OR "retrospective"))	
Limits:		
4.	Limiters - Published Date: 20121101-; Publication Type: Journal Article; Language: Danish, English, German, Norwegian, Swedish	Skriv text..
Final	1 AND 2 AND 3 AND 4	39

The search result, usually found at the end of the documentation, forms the list of abstracts

AB = Abstract
AU = Author
DE = Term from the thesaurus
MH = Term from the "Cinahl Headings" thesaurus
MM = Major Concept
TI = Title
TX = All Text. Performs a keyword search of all the database's searchable fields
ZC = Methodology Index
* = Truncation
" " = Citation Marks; searches for an exact phrase

Cohrane Library via Wiley 2016-02-19 **CGM vid icke-insulinbehandlad diabetes**		
	Search terms	**Items found**
Search terms:		
1.	(pump* or infusion*) and insulin* Publication Year from 2012, in Cochrane Reviews (Reviews only), Other Reviews, Technology Assessments and Economic Evaluations (Word variations have been searched)	161
2.	"continuous glucose monitoring" or "continuous glucose monitor" or "continuous blood glucose monitoring" or "cgm" or "cgms" or "Guardian RT" or "Freestyle Navigator" or "Dex com seven plus") Publication year from 2012 in Cochrane Reviews (Reviews only), Other Reviews, Technology Assessments and Economic Evaluations (Word variations have been searched)	25
3.	MeSH descriptor: [Monitoring, Ambulatory] this term only	495
4.	MeSH descriptor: [Blood Glucose] explode all trees	12719
Final	#1 OR #2 OR (#3 AND #4)	251

The search result, usually found at the end of the documentation, forms the list of abstracts

[AU] = Author
[MAJR] = MeSH Major Topic
[MeSH] = Term from the Medline controlled vocabulary, including terms found below this term in the MeSH hierarchy
[MeSH:NoExp] = Does not include terms found below this term in the MeSH hierarchy
Systematic[SB] = Filter for retrieving systematic reviews
[TI] = Title
[TIAB] = Title or abstract
[TW] = Text Word
* = Truncation
" " = Citation Marks; searches for an exact phrase

CDSR = Cochrane Database of Systematic Review
CENTRAL = Cochrane Central Register of Controlled Trials, "trials"
CRM = Method Studies
DARE = Database Abstracts of Reviews of Effects, "other reviews"
EED = Economic Evaluations
HTA = Health Technology Assessments

PsycInfo 2016-02-19 **Population: Barn under förskoleålder**		
	Search terms	**Items found**
Intervention		
1.	TI ((insulin N3 pump*) OR (implant* N3 pump*) OR "continuous subcutaneous insulin infusion*" OR CSII OR (((infusion N3 pump*) or "pump therapy") AND "Insulin") OR "sensor-augmented pump*" OR "patch pump*" OR omnipod* OR "accu-check*" OR accucheck* OR accuchek* OR dana OR animas* OR (Paradigm* N3 Medtronic) OR "continuous glucose monitor*" OR "continuous blood glucose monitor*" OR "cgm" OR "cgms" OR "Guardian RT" OR "Freestyle Navigator") OR AB ((insulin N3 pump*) OR (implant* N3 pump*) OR "continuous subcutaneous insulin infusion*" OR CSII OR (((infusion N3 pump*) or "pump therapy") AND "Insulin") OR "sensor-augmented pump*" OR "patch pump*" OR omnipod* OR "accu-check*" OR accucheck* OR accuchek* OR dana OR animas* OR (Paradigm* N3 Medtronic) OR "continuous glucose monitor*" OR "continuous blood glucose monitor*" OR "cgm" OR "cgms" OR "Guardian RT" OR "Freestyle Navigator") OR KW ((insulin N3 pump*) OR (implant* N3 pump*) OR "continuous subcutaneous insulin infusion*" OR CSII OR (((infusion N3 pump*) or "pump therapy") AND "Insulin") OR "sensor-augmented pump*" OR "patch pump*" OR omnipod* OR "accu-check*" OR accucheck* OR accuchek* OR dana OR animas* OR (Paradigm* N3 Medtronic) OR "continuous glucose monitor*" OR "continuous blood glucose monitor*" OR "cgm" OR "cgms" OR "Guardian RT" OR "Freestyle Navigator")	162

Study type:		
2.	TX ((systematic W1 (review# or overview# or literature#)) OR meta-analy* OR metaanaly* OR metanal* OR pubmed OR cochrane OR medline OR embase OR psyclit OR cinahl OR cinhal) OR AB ((reference W1 list*) OR bibliograph* OR (hand-search*) OR "relevant journals" OR (manual W1 search*)) OR ((AB "selection criteria" OR AB "data extraction") AND MR literature review) OR DE "Treatment Effectiveness Evaluation" OR DE "Clinical Audits" OR DE "Random Sampling" OR DE "Clinical Trials" OR DE "Placebo" OR TI ((clinical N3 trial#) OR "random*" OR "RCT*" OR ((singl* or doubl*) N2 (blind* or mask*)) OR "placebo*") OR AB ((clinical N3 trial#) OR "random*" OR "RCT*" OR ((singl* or doubl*) N2 (blind* or mask*)) OR "placebo*") OR KW ((clinical N3 trial#) OR "random*" OR "RCT*" OR ((singl* or doubl*) N2 (blind* or mask*)) OR "placebo*") OR DE "Observational Methods" OR DE "Longitudinal Studies" OR DE "Prospective Studies" OR DE "Followup Studies" OR DE "Retrospective Studies" OR DE "Cohort Analysis" OR ZC "Longitudinal Study" OR ZC "Prospective Study" OR ZC "Retrospective Study" OR ZC "Followup Study" OR TI (cohort* OR observational* OR "follow up" OR "longitudinal" OR "retrospective" OR "prospective") OR AB (cohort* OR observational* OR "follow up" OR "longitudinal" OR "retrospective" OR "prospective") OR KW (cohort* OR observational* OR "follow up" OR "longitudinal" OR "retrospective" OR "prospective")	109951
Limits:		
3.	TX (infan* OR toddler* OR neonat* OR newborn*)	16914
4.	Limiters - Published Date: 20121101-; Publication Type: All Journals; Language: Danish, English, German, Norwegian, Swedish	
Final	#1 AND #2 AND #3 AND #4	0

PsycInfo 2016-02-19 **Population: Barn, ungdomar och gravida**		
	Search terms	**Items found**
Population:		
1.	(TX "Diabetes Mellitus" OR TX (IDDM OR T1DM OR T1D OR ((diabet* or dm) N5 (insulindepend* or insulin-depend* or "juvenile onset" or "sudden onset" or brittle or "ketosis prone" or autoimmune)) OR ((diabet* or dm) N5 ("type 1" or "type I" or "type1" or "typeI")) OR ((diabet* or dm) N5 ("type 2" or "type II" or "type2" or "typeII")) OR T2DM OR T2D OR MODY OR NIDDM OR ((diabet* or dm) N5 ("non insulin dependent" or "noninsulin dependent" or "Maturity Onset" or "Adult Onset" or "Slow-Onset" or stable or "ketosis resistant")) OR "latent autoimmune diabetes" OR LADA))	3084
Intervention:		
2.	TI ((insulin N3 pump*) OR (implant* N3 pump*) OR "continuous subcutaneous insulin infusion*" OR CSII OR (((infusion N3 pump*) or "pump therapy") AND "Insulin") OR "sensor-augmented pump*" OR "patch pump*" OR omnipod* OR "accu-check*" OR accucheck* OR accuchek* OR dana OR animas* OR (Paradigm* N3 Medtronic) OR "continuous glucose monitor*" OR "continuous blood glucose monitor*" OR "cgm" OR "cgms" OR "Guardian RT" OR "Freestyle Navigator") OR AB ((insulin N3 pump*) OR (implant* N3 pump*) OR "continuous subcutaneous insulin infusion*" OR CSII OR (((infusion N3 pump*) or "pump therapy") AND	166

PsycInfo 2016-02-19 **Population: Barn, ungdomar och gravida**		
	"Insulin") OR "sensor-augmented pump*" OR "patch pump*" OR omnipod* OR "accu-check*" OR accucheck* OR accuchek* OR dana OR animas* OR (Paradigm* N3 Medtronic) OR "continuous glucose monitor*" OR "continuous blood glucose monitor*" OR "cgm" OR "cgms" OR "Guardian RT" OR "Freestyle Navigator") OR KW ((insulin N3 pump*) OR (implant* N3 pump*) OR "continuous subcutaneous insulin infusion*" OR CSII OR (((infusion N3 pump*) or "pump therapy") AND "Insulin") OR "sensor-augmented pump*" OR "patch pump*" OR omnipod* OR "accu-check*" OR accucheck* OR accuchek* OR dana OR animas* OR (Paradigm* N3 Medtronic) OR "continuous glucose monitor*" OR "continuous blood glucose monitor*" OR "cgm" OR "cgms" OR "Guardian RT" OR "Freestyle Navigator")	
Study type:		
3.	TX ((systematic W1 (review# or overview# or literature#)) OR meta-analy* OR metaanaly* OR metanal* OR pubmed OR cochrane OR medline OR embase OR psyclit OR cinahl OR cinhal) OR AB ((reference W1 list*) OR bibliograph* OR (hand-search*) OR "relevant journals" OR (manual W1 search*)) OR ((AB "selection criteria" OR AB "data extraction") AND MR literature review) OR DE "Treatment Effectiveness Evaluation" OR DE "Clinical Audits" OR DE "Random Sampling" OR DE "Clinical Trials" OR DE "Placebo" OR TI ((clinical N3 trial#) OR "random*" OR "RCT*" OR ((singl* or doubl*) N2 (blind* or mask*)) OR "placebo*") OR AB ((clinical N3 trial#) OR "random*" OR "RCT*" OR ((singl* or doubl*) N2 (blind* or mask*)) OR "placebo*") OR KW ((clinical N3 trial#) OR "random*" OR "RCT*" OR ((singl* or doubl*) N2 (blind* or mask*)) OR "placebo*") OR DE "Observational Methods" OR DE "Longitudinal Studies" OR DE "Prospective Studies" OR DE "Followup Studies" OR DE "Retrospective Studies" OR DE "Cohort Analysis" OR ZC "Longitudinal Study" OR ZC "Prospective Study" OR ZC "Retrospective Study" OR ZC "Followup Study" OR TI (cohort* OR observational* OR "follow up" OR "longitudinal" OR "retrospective" OR "prospective") OR AB (cohort* OR observational* OR "follow up" OR "longitudinal" OR "retrospective" OR "prospective") OR KW (cohort* OR observational* OR "follow up" OR "longitudinal" OR "retrospective" OR "prospective")	114968
Limits:		
4.	TX ("young children" OR toddler* OR preschool* OR pre-school* OR kindergarten*)	20220
5.	TX (child* OR adolescen* OR juvenile* OR pediatric* OR teen* OR young* OR youth* OR school*)	298138
6.	#1 AND TX pregn*	*89*
7.	Limiters - Published Date: 20120901-; Publication Type: All Journals; Language: Danish, English, German, Norwegian, Swedish	
Combined sets:		
8.	1 AND 2 AND 3 AND 4 AND 7	0
9.	1 AND 2 AND 3 AND 5 AND 7	8
10.	1 AND 2 AND 3 AND 6 AND 7	0
Final		8

PsycInfo 2016-02-19 **Population: Vuxna med diabetes**		
	Search terms	**Items found**
Population:		
1.	(TX "Diabetes Mellitus" OR TX (IDDM OR T1DM OR T1D OR ((diabet* or dm) N5 (insulindepend* or insulin-depend* or "juvenile onset" or "sudden onset" or brittle or "ketosis prone" or autoimmune)) OR ((diabet* or dm) N5 ("type 1" or "type I" or "type1" or "typeI")) OR ((diabet* or dm) N5 ("type 2" or "type II" or "type2" or "typeII")) OR T2DM OR T2D OR MODY OR NIDDM OR ((diabet* or dm) N5 ("non insulin dependent" or "noninsulin dependent" or "Maturity Onset" or "Adult Onset" or "Slow-Onset" or stable or "ketosis resistant")) OR "latent autoimmune diabetes" OR LADA))	2916
Intervention:		
2.	TI ("continuous glucose monitor*" OR "continuous blood glucose monitor*" OR "cgm" OR "cgms" OR "Guardian RT" OR "Freestyle Navigator") OR AB ("continuous glucose monitor*" OR "continuous blood glucose monitor*" OR "cgm" OR "cgms" OR "Guardian RT" OR "Freestyle Navigator") OR KW 1	24
Study types:		
3.	TX ((systematic W1 (review# or overview# or literature#)) OR meta-analy* OR metaanaly* OR metanal* OR pubmed OR cochrane OR medline OR embase OR psyclit OR cinahl OR cinhal) OR AB ((reference W1 list*) OR bibliograph* OR (hand-search*) OR "relevant journals" OR (manual W1 search*)) OR ((AB "selection criteria" OR AB "data extraction") AND MR literature review) OR DE "Treatment Effectiveness Evaluation" OR DE "Clinical Audits" OR DE "Random Sampling" OR DE "Clinical Trials" OR DE "Placebo" OR TI ((clinical N3 trial#) OR "random*" OR "RCT*" OR ((singl* or doubl*) N2 (blind* or mask*)) OR "placebo*") OR AB ((clinical N3 trial#) OR "random*" OR "RCT*" OR ((singl* or doubl*) N2 (blind* or mask*)) OR "placebo*") OR KW ((clinical N3 trial#) OR "random*" OR "RCT*" OR ((singl* or doubl*) N2 (blind* or mask*)) OR "placebo*") OR DE "Observational Methods" OR DE "Longitudinal Studies" OR DE "Prospective Studies" OR DE "Followup Studies" OR DE "Retrospective Studies" OR DE "Cohort Analysis" OR ZC "Longitudinal Study" OR ZC "Prospective Study" OR ZC "Retrospective Study" OR ZC "Followup Study" OR TI (cohort* OR observational* OR "follow up" OR "longitudinal" OR "retrospective" OR "prospective") OR AB (cohort* OR observational* OR "follow up" OR "longitudinal" OR "retrospective" OR "prospective") OR KW (cohort* OR observational* OR "follow up" OR "longitudinal" OR "retrospective" OR "prospective")	109951
Limits:		
4.	Limiters - Published Date: 20121101-; Publication Type: All Journals; Language: Danish, English, German, Norwegian, Swedish	
Combined sets		
Final	1 AND 2 AND 3 AND 4	1

The search result, usually found at the end of the documentation, forms the list of abstracts

AB = Abstract
AU = Author
DE = Term from the thesaurus
MH = Term from the "Cinahl Headings" thesaurus

MM = Major Concept
TI = Title
TX = All Text. Performs a keyword search of all the database's searchable fields
ZC = Methodology Index
* = Truncation
“ “ = Citation Marks; searches for an exact phrase

PubMed via NLM 2016-02-19 **Hälsoekonomiska studier**		
	Search terms	**Items found**
Population:		
1.	"Diabetes Mellitus"[Mesh:NoExp] OR "diabetes mellitus"[tiab] OR "Diabetes Mellitus, Type 1"[Mesh] OR IDDM[tiab] OR T1DM[tiab] OR T1D[tiab] OR ((diabet*[tiab] or dm[tiab]) AND (insulindepend*[tiab] or insulin-depend*[tiab] or juvenile onset[tiab] or sudden onset[tiab] or brittle[tiab] or ketosis prone[tiab] or autoimmune[tiab])) OR ((diabet*[tiab] or dm[tiab]) AND ("type 1"[tiab] or "type I"[tiab] or "type1"[tiab] or "typeI"[tiab])) OR "Diabetes Mellitus, Type 2"[Mesh] OR ((diabet*[tiab] or dm[tiab]) AND ("type 2"[tiab] or "type II"[tiab] or "type2"[tiab] or "typeII"[tiab])) OR T2DM[tiab] OR T2D[tiab] OR MODY[tiab] OR NIDDM[tiab] OR ((diabet*[tiab] or dm[tiab]) AND ("non insulin dependent"[tiab] or "noninsulin dependent"[tiab] or Maturity Onset[tiab] or Adult Onset[tiab] or Slow-Onset[tiab] or stable[tiab] or ketosis resistant[tiab])) OR "latent autoimmune diabetes"[tiab] OR LADA[tiab]	65727
Intervention:		
2.	("Monitoring, Ambulatory"[Mesh:NoExp] AND "Blood Glucose"[Mesh]) OR "continuous glucose monitoring"[tiab] OR "continuous glucose monitor"[tiab] OR "continuous blood glucose monitoring"[tiab] OR "cgm"[tiab] OR "cgms"[tiab] OR "Guardian RT"[tiab] OR "Freestyle Navigator"[tiab]	1024
Outcome:		
3.	"Economics"[Mesh:NoExp] OR "Costs and Cost Analysis"[Mesh] OR "Economics, Hospital"[Mesh] OR "Economics, Medical"[Mesh] OR "Economics, Nursing"[Mesh] OR "Economics, Pharmaceutical"[Mesh] OR "Fees and Charges"[Mesh] OR "Budgets"[Mesh] OR "Resource Allocation"[Mesh] OR "economics" [Subheading] OR "cost utility"[tiab] OR "cost/utility"[tiab] OR cost/benefit*[tiab] OR cost benefit*[tiab] OR "cost effectiveness"[tiab] OR cost/effectiveness[tiab] OR "cost of illness"[tiab] OR cost analys*[tiab] OR cost consequence*[tiab] OR cost saving*[tiab] OR cost breakdown*[tiab] OR cost lowering*[tiab] OR cost estimate*[tiab] OR cost variable*[tiab] OR cost allocation*[tiab] OR cost control*[tiab] OR "cost per unit"[tiab] OR economic*[ti] OR cost[ti] OR costs[ti] OR costing[ti] OR costly[ti] OR "value for money"[tiab] OR pharmacoeconomic*[tiab] OR "icer"[tiab] OR economic evaluation*[tiab] OR economic analys*[tiab] OR economic stud*[tiab] OR ((economic*[tiab] OR price*[tiab] OR pricing[tiab] OR cost[tiab] OR costs[tiab] OR costing[tiab] OR costly[tiab] OR financial[tiab] OR finance*[tiab] OR expenditure*[tiab] OR budget*[tiab] OR resource allocat*[tiab] OR "resource utilisation"[tiab] OR "resource utilization"[tiab] OR charge*[tiab] OR fee[tiab] OR fees[tiab]) NOT medline[sb]) OR "Quality-Adjusted Life Years"[Mesh] OR utility[tiab] OR utilities[tiab] OR qaly*[tiab] OR "quality adjusted life"[tiab] OR "disability adjusted life"[tiab] OR daly*[tiab] OR qald*[tiab] OR qale*[tiab] OR qtime*[tiab] OR "hye"[tiab] OR "hyes"[tiab] OR "healthy year equivalent"[tiab] OR "healthy	173475

PubMed via NLM 2016-02-19 **Hälsoekonomiska studier**		
	year equivalents"[tiab] OR "healthy years equivalent"[tiab] OR "healthy years equivalents"[tiab] OR "quality of well being"[tiab] OR "qwb"[tiab] OR "euroqol"[tiab] OR "eq5d"[tiab] OR "eq 5d"[tiab] OR "health utilities index"[tiab] OR "hui"[tiab] OR "hui2"[tiab] OR "hui3"[tiab] OR "rosser"[tiab] OR "sf 6"[tiab] OR "sf6"[tiab] OR "sf6D"[tiab] OR "sf 6D"[tiab] OR "short form 6D"[tiab] OR "time trade off"[tiab] OR "time tradeoff"[tiab] OR "standard gamble"[tiab] OR "willingness to pay"[tiab] OR "willingness to accept"[tiab] OR "willing to pay"[tiab]	
Limits:		
4.	Filters activated: Publication date from 2012/11/29; Danish; English; German; Norwegian; Swedish	
Final	1 AND 2 AND 3 AND 4	38

The search result, usually found at the end of the documentation, forms the list of abstracts

[MeSH] = Term from the Medline controlled vocabulary, including terms found below this term in the MeSH hierarchy
[MeSH:NoExp] = Does not include terms found below this term in the MeSH hierarchy
[MAJR] = MeSH Major Topic
[TIAB] = Title or abstract
[TI] = Title
[AU] = Author
[TW] = Text Word
Systematic[SB] = Filter for retrieving systematic reviews
* = Truncation
“ “ = Citation Marks; searches for an exact phrase

Embase via embase.com 2016-02-19 **Hälsoekonomiska studier**		
	Search terms	**Items found**
Population:		
1.	'diabetes mellitus'/mj OR (diabets Near/3 mellitus):ti,ab OR 'insulin dependent diabetes mellitus'/mj OR (IDDM OR T1DM OR T1D):ti,ab OR ((diabet* or dm) AND (insulindepend* or (insulin next/1 depend*) or "juvenile onset" or "sudden onset" or brittle or "ketosis prone" or autoimmune)):ti,ab OR ((diabet* or dm) AND ("type 1" or "type I" or "type1" or "typeI")):ti,ab OR 'non insulin dependent diabetes mellitus'/mj OR ((diabet* or dm) AND ("type 2" or "type II" or "type2" or "typeII")):ti,ab OR (T2DM OR T2D OR MODY OR NIDDM):ti,ab OR ((diabet* or dm) AND ("non insulin dependent" or "noninsulin dependent" or "Maturity Onset" or "Adult Onset" or "Slow-Onset" or stable or "ketosis resistant")):ti,ab OR "latent autoimmune diabetes":ti,ab OR LADA:ti,ab	227816

Intervention:		
2.	('ambulatory monitoring'/mj AND 'glucose blood level'/mj) OR ("continuous glucose monitoring" OR "continuous glucose monitor" OR "continuous blood glucose monitoring" OR "cgm" OR "cgms" OR "Guardian RT" OR "Freestyle Navigator"):ti,ab	2616
Outcome:		
3.	('health economics'/de/mj OR 'economic evaluation'/exp/mj OR 'health-care-cost'/exp/mj OR 'pharmacoeconomics'/exp/mj OR 'economic aspect'/exp/mj OR 'financial management'/exp/mj OR ((economic near/2 (evaluation* OR analys* OR stud*)) OR (value* near/2 (money or monetary)) OR pharmacoeconomic* OR (pharmaco next/1economic*) OR "icer" OR (cost NEAR/2 (util* OR benefit* OR effectiveness OR illness OR analys* OR consequence* OR saving* OR breakdown* OR low* OR high* OR estimate* OR variable* OR allocation* OR control* OR unit))):ti,ab OR (economic* OR cost*):ti OR 'quality adjusted life year'/de/mj OR utility:ti,ab OR utilities:ti,ab OR qaly*:ti,ab OR "quality adjusted life":ti,ab OR "disability adjusted life":ti,ab OR daly*:ti,ab OR qald*:ti,ab OR qale*:ti,ab OR qtime*:ti,ab OR "hye":ti,ab OR "hyes":ti,ab OR (('healthy year' OR 'healthy years' OR 'health year' OR 'health years') NEXT/2 equivalent*):ti,ab OR "quality of well being":ti,ab OR "qwb":ti,ab OR "euroqol":ti,ab OR "eq5d":ti,ab OR "eq 5d":ti,ab OR "health utilities index":ti,ab OR "hui":ti,ab OR "hui2":ti,ab OR "hui3":ti,ab OR "rosser":ti,ab OR "sf 6":ti,ab OR "sf6":ti,ab OR "sf6D":ti,ab OR "sf 6D":ti,ab OR "short form 6D":ti,ab OR "time trade off":ti,ab OR "time tradeoff":ti,ab OR "standard gamble":ti,ab OR ((willing or willingness) near/2 (pay or accept)):ti,ab)	191198
Limits:		
4.	([danish]/lim OR [english]/lim OR [german]/lim OR [norwegian]/lim OR [swedish]/lim) AND [2012-2016]/py	
Final	1 AND 2 AND 3 AND 4	75

/de= Term from the EMTREE controlled vocabulary
/exp= Includes terms found below this term in the EMTREE hierarchy
/mj = Major Topic
:ab = Abstract
:au = Author
:ti = Article Title
:ti:ab = Title or abstract
* = Truncation
' ' = Citation Marks; searches for an exact phrase

Referenser

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