

Tandvårdsstöd
Care Provider Interfaces
Subscription Dental Care v4

Versions

Version	Date	Changes	Name
RevA	2016-06-13	New version SubscriptionDentalCare.v4, changes from v3: <ul style="list-style-type: none"> • Possibility to select which ATB to claim, the oldest or the newest. • Length of element “contract-id” supports 7-10 digits. • It is possible to cancel the contract. • It is possible to change the end-date of a contract. • Changed name for element “atb-usage-count” to “atb-number. • New information messages 865, 866. • New error messages 864, 867, 868, 869, 870, and 871. • Updated text for error message 859. • New information messages 872, 873, and 874. • Changed text in information messages 866, 873. • Changed text in error messages 823, 863. • Removed information message 865. • Attribute “vendor-name” is changed to mandatory. • Attribute “vendor-name” should be forwarded from SHS to CRM in SubscriptionDentalCare.v4 requests. • Length of “vendor-name” is changed to char (30). • Length of “product-name” is changed to char (30). • Added “Complex Type” in tables for grouped elements, i.e. yellow lines, since this is the type used in the xml-schema. • Changed translation for “contract-id” in request, the CRM parameter name is now “IContractId2” . • Changed translation for “contract-id” in response and push-response, the CRM parameter name is now “EContractId2. • Updated XML samples. • Updated statistics. • Signed-off by Mohamed Osman 	Lars Dalenius
RevB	2016-06-23	<ul style="list-style-type: none"> • Added information regarding Complex Type “modify-contract” in description field in Table 2. 	Lars Dalenius
RevC	2016-08-28	<ul style="list-style-type: none"> • Added error message 875. 	Lars Dalenius
RevD	2017-04-21	<ul style="list-style-type: none"> • Added error message 833. • Added information that the error response can contain multiple error messages in Table 7. • Added a chapter with STB codes for STB qualifying diseases. 	Lars Dalenius
RevE	2018-05-08	Updated for TVS 2018-06-21: <ul style="list-style-type: none"> • New information messages, Table 6 • Updated reference list for Confluence • Elements that are part of a Complex Type are now marked with bright yellow (described in Table 1) • Added item level for Complex Types Reviewed and approved by Alexander Karczewski	Lars Dalenius

Version	Date	Changes	Name
RevF	2018-05-30	Added new information message 816 in Table 6	Lars Dalenius
RevG	2018-06-04	Minor correction: Updated text for information message 576 in Table 6	Lars Dalenius

Attachment- and reference list

Number	Title, document ID, search path
1	Confluence: 002_03_01_I-123_SubscriptionDentalCareV4_FS http://confluence.sfa.se/x/-wLxAQ
2	Confluence: 002_03_01_I-123_SubscriptionDentalCareV4 - PushInterface_FS http://confluence.sfa.se/x/FwPxAQ
3	Git: XML-schema http://stash.sfa.se/projects/FORS/repos/tandvardsstod/browse/shsschema?at=refs%2Fheads%2Fdevelop
4	Grupprum Tandvårdsstöd förvaltning, typ=Systemdokument: Teknisk arkitektur Tandvårdsstöd

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1 Introduction

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Release	TVS 2018-06-21

The main information in this document is the tables which contain all parameters and their translation between XML and SAP parameters. There is some color codes used in the tables:


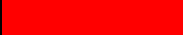


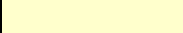
Color	Description
	Cells are changed or added in this version of the document.
	Parameters that are removed in this version of the document.
	Parameter is not translated between XML and SAP.
	Complex Type which does not contain a single value, but several parameters.
	Parameters that are part of a Complex Type.

Table 1 Color codes used in the parameter and translation tables.

2 Integrations

The Care Provider Interface SubscriptionDentalCare makes use of two interfaces:

Nr	Description
1	An integration used to allow the dental system to create subscriptions and update existing subscriptions with payments within SAP-CRM. Only Swedish citizens can have subscriptions.
2	SAP-CRM pushes an evaluated response back to the dental system via SHS. (SHS = FK:s Spridning och HämtningsSystem)

The message request will be sent via the SHS internal queue service as a WS request from SHS to SAP-CRM. The anticipated message flow is depicted in the following diagram:

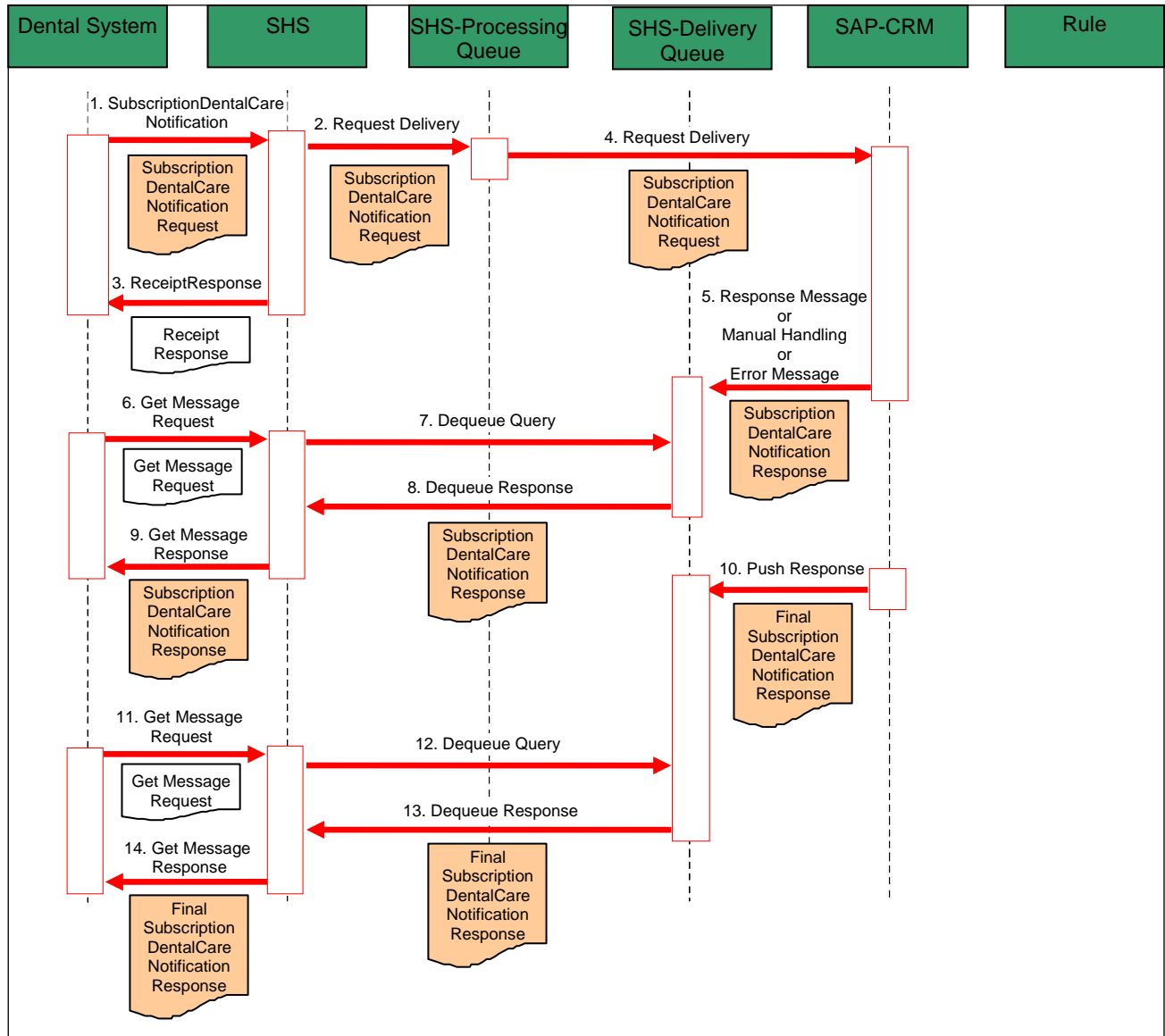


Figure 1 Sequence diagram for the SubscriptionDentalCare interface

Architecturally, the messages will flow in the following manner:

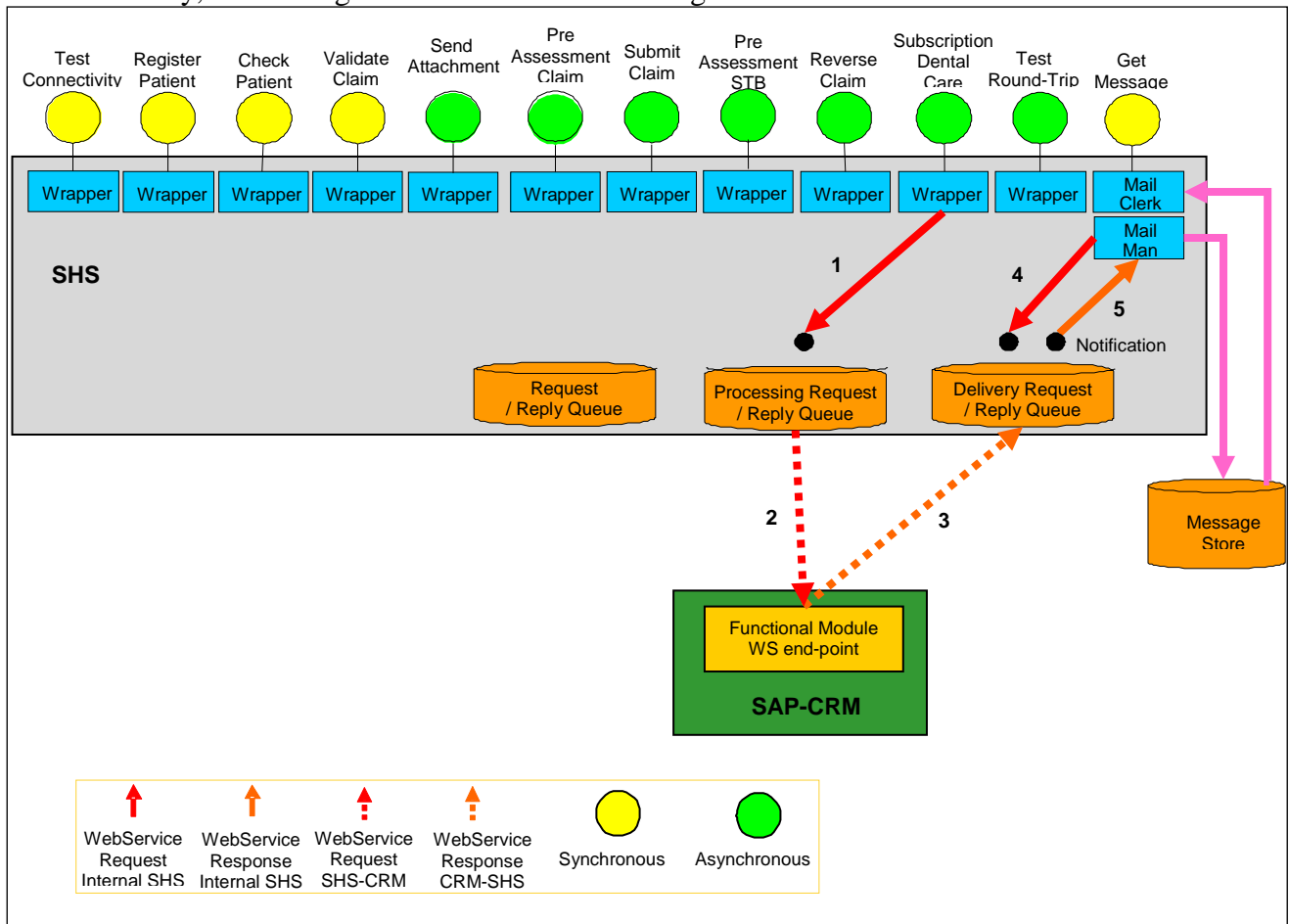


Figure 2 Architectural overview for the SubscriptionDentalCare interface

2.1 Message handling in SHS

For a detailed description of error-codes, see Table 7.

1. If SHS fails to deliver the inbound message to SAP-CRM (Figure 1 step 4), SHS should place the inbound message back into the processing queue for later retry. An error response with error-code 004 is placed into the reply queue to be retrieved asynchronously by the dental system (Figure 1 GetMessage response in step 9).
2. If SHS receives an error message from SAP-CRM (Figure 1 step 5) with EStatus=E and EErrorNumber=803, the inbound message is placed back into the processing queue for retry. If SHS after 10 minutes and a number of retries still receives EStatus=E and EErrorNumber=803, an error response with error-code 803 is placed into the reply queue to be retrieved asynchronously by the dental system (Figure 1 GetMessage response in step 9).
3. If the transaction is automatically approved, SAP-CRM delivers two response messages to SHS. First response (Figure 1 step 5) contains rfr-status/EClaimStatus=A directly followed by a push-response (Figure 1 step 10) containing the same response message. In these cases, SHS will only deliver the push-response, i.e. place the push-response into the reply queue to be retrieved asynchronously by the dental system (Figure 1 GetMessage response in step 14).

3 Integration 1

The interface is invoked by the dental system which sends a request and receives a synchronous response back to SHS. The second integration which describes the asynchronous response sent back to the dental system mailbox is described in chapter 4.

3.1 SubscriptionDentalCareNotification request

3.1.1 Message and translation

The following section describes how to translate the incoming request parameters and attributes from the XML message (i.e. a SubscriptionDentalCareNotification message) received at the SAP CRM system through WS.

XML				SAP-XML	Transformation info		Details	
Name	Element / Attribute	Optional	Data type	Parameter	Comp.	Transformation	Description	Comments
request-id	Attribute		char (36)	IRequestId			ID used to link the request with the response.	The request id is sent to SAP-CRM in order to be able to link the request with the asynchronous response.
shs-invoked-interface	Attribute	X	char (36)					This attribute may be ignored. It is not sent to SAP-CRM.
vendor-name	Attribute		char (30)	IVendorName				This attribute is mandatory, it is used for statistics. It is also sent to SAP-CRM and registered in the clinic's block for "Egenskaper".

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XML				SAP-XML	Transformation info		Details	
Name	Element / Attribute	Optional	Data type	Parameter	Comp.	Transformation	Description	Comments
product-name	Attribute	X	char (30)					This attribute may be ignored. It is not sent to SAP-CRM.
version-number	Attribute	X	char (15)					This attribute may be ignored. It is not sent to SAP-CRM.
organization-number	Attribute	X	int (10)	IOrgNum			The organizational number of the care provider.	This attribute is copied to the Response Message as the "organization-number". This XML attribute is always overwritten by SHS with the ID from the certificate. The certificate is issued with the care provider's organization number as ID.
user-id	Attribute		int (12)	IUserId	No	No	User sending the request.	Used for iLogging purposes
external-id	Element		char (40)	IExternalId	No	No	The id of the claim used in the journal systems	
social-security-number	Element	(see comment)	int (12)	IPatientId	No	No	The social security number of the Patient.	The inbound XML Message will contain either the social-security-number or the foreign-identity number, but not both.
foreign-identity-number	Element	(see comment)	char (20)	IPatientId	No	The SHS integration will add an F in front of this value before sending it to CRM.	The passport ID or other foreign ID of the patient.	The inbound XML Message will contain either the social-security-number or the foreign-identity number, but not both.

XML				SAP-XML	Transformation info		Details	
Name	Element / Attribute	Optional	Data type	Parameter	Comp.	Transformation	Description	Comments
clinic-id	Element		int (8)	IClinicId	No	No	The id that the clinic has been assigned by FK.	
new-contract	Complex Type	(see comment)					The new-contract structure is used when creating a new subscription contract.	The request must contain only one structure of "new-contract", "modify-contract" or "contract-payment". If new-contract is used, no modify-contract or contract-payment is allowed.
new-contract/ start-date	Element		date	IStartDate	No	xs:date to DATS.	The date from which the subscription dental care is valid.	
new-contract/ end-date	Element		date	IEndDate	No	xs:date to DATS	The date upon which the dental care subscription expires.	Example '2009-03-29'
new-contract/ price	Element		int (13)	IContractPrice	No	No	The price of the contract	
new-contract/ diagnosis	Element	X	int (4)	ISubscribedDiagnosis\ IDiagnosis	No	No	Subscribed diagnosis data	Multiple diagnose IDs could be submitted.
modify-contract	Complex Type	(see comment)					The modify-contract structure is used to modify an existing subscription contract. If this structure is used, the Complex Type "atb-usage" is not allowed.	The request must contain only one structure of "new-contract", "modify-contract" or "contract-payment". If modify-contract is used, no new-contract or contract-payment is allowed.

XML				SAP-XML	Transformation info		Details	
Name	Element / Attribute	Optional	Data type	Parameter	Comp.	Transformation	Description	Comments
modify-contract/ contract-id	Element		int (7-10)	IContractId2	No	No	The ID of an existing subscription contract.	New contracts will be created with length=10 digits while existing contracts uses 7 digits.
modify-contract/ end-date	Element	(see comment)	date	IEndDate	No	xs:date to DATS	A changed date upon which the existing dental care subscription should expire. The new end-date must be within the original contract period.	The inbound XML Message will contain either the element end-date or cancel but not both. Any ATB, STB or HCP reimbursements will be reclaimed in corrections.
modify-contract/ cancel	Element	(see comment)	boolean	ICancel		true/false to X/(blank)	Set to true if the subscription should be canceled. A canceled contract is treated as it never have existed, e.g. used for deleting faulty contracts.	The inbound XML Message will contain either the element end-date or cancel but not both. Any ATB, STB or HCP reimbursements will be reclaimed in corrections.
contract-payment	Complex Type	(see comment)					When updating an existing subscription contract with additional payment the contract-payment block is used.	The request must contain only one structure of "new-contract", "modify-contract" or "contract-payment". If contract-payment is used, no new-contract or modify-contract is allowed.
contract-payment/ contract-id	Element		int(7-10)	IContractId2	No	No	The ID of an existing subscription contract.	New contracts will be created with length=10 digits while existing contracts uses 7 digits.
atb-usage	Complex Type	X					These fields are only required if ATB is claimed.	

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XML				SAP-XML	Transformation info		Details	
Name	Element / Attribute	Optional	Data type	Parameter	Comp.	Transformation	Description	Comments
atb-usage/ atb-number	Element		int (1)	IAtbNumber	No	No	A unique identifier for the claimed ATB. Valid values: 1=oldest ATB 2= newest ATB 3= both ATB	Note: When claiming one ATB, values 1 and 2 claims the oldest/newest ATB exclusively. In previous contract version v3 when claiming one ATB, the oldest was default. If that was used, instead the newest was selected.
atb-usage/ teeth-count	Element		int (2)	ITeethCount	No	No	The number of teeth in the Patient's mouth.	Max allowed teeth-count=32. Error 003 (Invalid XML) if teeth-count > 32.
atb-usage/ untreated-teeth-count	Element		int (2)	IHealthyTeeth	No	No	The number of teeth in the Patient's mouth that are perfectly healthy (i.e. have never undergone a dental treatment).	Error 304 if untreated-teeth-count > teeth-count.
stb-cause	Element	X	int(4)	IStbReason	Numc	No	STB reason code, 4 digits. The STB reason codes can be found in Table 3.	When stb-cause is present, the patient's remaining STB amount is used. (i.e. stb-amount-available from CheckPatient response)

Table 2 Overview over parameters and their translation for the SubscriptionDentalCareNotification Request

3.1.2 STB codes and diseases

STB code	STB qualifying diseases
1100	Muntorrhet pga. läkemedelsbehandling
1300	Muntorrhet pga. strålbehandling
1500	Sjögrens syndrom
1700	KOL och syrgas eller näringsdryck
1900	Cystisk fibros
2100	Ulcerös kolit
2300	Crohns sjukdom
2500	Tarmsvikt
2700	Erosioner pga. ätstörningar el. reflux
2900	Svårinställd diabetes
3100	Genomgår dialysbehandling
3300	Immunosuppression pga. läkemedelsbehandling
3500	Genomgången organtransplantation

Table 3 STB codes and diseases

3.1.3 Sample XML

The following sample message demonstrates a typical request message when creating a new subscription contract and claiming STB and two ATB.

```

<FK.TV.SubscriptionDentalCareNotification.v4
  xmlns="http://fk.se/SHS/xsd/tanden"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://fk.se/SHS/xsd/tanden ../TandenTypes.xsd"
  shs-invoked-interface="Subscription Dental Care v4"
  request-id="a4924e42-4214-ba93-af22-98739237ba23"
  vendor-name="Vendor-Name"
  product-name="Product-Name"
  version-number="Vx"
  organization-number="2929291234"
  user-id="197512141502">
  <social-security-number>198003141234</social-security-number>
  <clinic-id>33321345</clinic-id>
  <new-contract>
    <start-date>2016-03-29</start-date>
    <end-date>2019-03-28</end-date>
    <price>3000</price>
  </new-contract>
  <atb-usage>
    <atb-number>3</atb-number>
    <teeth-count>32</teeth-count>
    <untreated-teeth-count>20</untreated-teeth-count>
  </atb-usage>
  <stb-cause>2700</stb-cause>
</FK.TV.SubscriptionDentalCareNotification.v4>
    
```

Figure 3 Sample XML for a SubscriptionDentalCareNotification request creating a new subscription contract and claiming STB and two ATB

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The following sample message demonstrates a typical request message when creating a new subscription contract with additional diagnosis.

```

<FK.TV.SubscriptionDentalCareNotification.v4
  xmlns="http://fk.se/SHS/xsd/tanden"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://fk.se/SHS/xsd/tanden ../TandenTypes.xsd"
  shs-invoked-interface="Subscription Dental Care v4"
  request-id="a4924e42-4214-ba93-af22-98739237ba23"
  vendor-name="Vendor-Name"
  product-name="Product-Name"
  version-number="Vx"
  organization-number="2929291234"
  user-id="197512141502">
  <social-security-number>198003141234</social-security-number>
  <clinic-id>33321345</clinic-id>
  <new-contract>
    <start-date>2016-03-29</start-date>
    <end-date>2019-03-28</end-date>
    <price>6000</price>
    <diagnosis>5031</diagnosis>
    <diagnosis>5033</diagnosis>
  </new-contract>
</FK.TV.SubscriptionDentalCareNotification.v4>
    
```

Figure 4 Sample XML for a SubscriptionDentalCareNotification request creating a new subscription contract with additional diagnosis

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The following sample message demonstrates a typical request when updating an existing subscription contract claiming the newest ATB and STB.

```

<FK.TV.SubscriptionDentalCareNotification.v4
  xmlns="http://fk.se/SHS/xsd/tanden"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://fk.se/SHS/xsd/tanden ../TandenTypes.xsd"
  shs-invoked-interface="Subscription Dental Care v4"
  request-id="a4924e42-4214-ba93-af22-98739237ba23"
  vendor-name="Vendor-Name"
  product-name="Product-Name"
  version-number="Vx"
  organization-number="2929291234"
  user-id="197512141502">
  <social-security-number>198003141234</social-security-number>
  <clinic-id>33318293</clinic-id>
  <contract-payment>
  |   <contract-id>5222444</contract-id>
  </contract-payment>
  <atb-usage>
  |   <atb-number>2</atb-number>
  |   <teeth-count>32</teeth-count>
  |   <untreated-teeth-count>20</untreated-teeth-count>
  </atb-usage>
  <stb-cause>2700</stb-cause>
</FK.TV.SubscriptionDentalCareNotification.v4>
    
```

Figure 5 Sample XML for a SubscriptionDentalCareNotification request for an existing subscription contract

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The following sample message demonstrates a typical request message that changes the end-date for an existing subscription contract.

```
<FK.TV.SubscriptionDentalCareNotification.v4
  xmlns="http://fk.se/SHS/xsd/tanden"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://fk.se/SHS/xsd/tanden ../TandenTypes.xsd"
  shs-invoked-interface="Subscription Dental Care v4"
  request-id="a4924e42-4214-ba93-af22-98739237ba23"
  vendor-name="Vendor-Name"
  product-name="Product-Name"
  version-number="Vx"
  organization-number="2929291234"
  user-id="197512141502">
  <social-security-number>198003141234</social-security-number>
  <clinic-id>33318293</clinic-id>
  <modify-contract>
    <contract-id>5222444</contract-id>
    <end-date>2017-03-28</end-date>
  </modify-contract>
</FK.TV.SubscriptionDentalCareNotification.v4>
```

Figure 6 Sample XML for a SubscriptionDentalCareNotification request that changes the end-date.

The following sample message demonstrates a typical request message that cancels an existing subscription contract.

```
<FK.TV.SubscriptionDentalCareNotification.v4
  xmlns="http://fk.se/SHS/xsd/tanden"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://fk.se/SHS/xsd/tanden ../TandenTypes.xsd"
  shs-invoked-interface="Subscription Dental Care v4"
  request-id="a4924e42-4214-ba93-af22-98739237ba23"
  vendor-name="Vendor-Name"
  product-name="Product-Name"
  version-number="Vx"
  organization-number="2929291234"
  user-id="197512141502">
  <social-security-number>198003141234</social-security-number>
  <clinic-id>33318293</clinic-id>
  <modify-contract>
    <contract-id>5222444</contract-id>
    <cancel>true</cancel>
  </modify-contract>
</FK.TV.SubscriptionDentalCareNotification.v4>
```

Figure 7 Sample XML for a SubscriptionDentalCareNotification request that cancels a subscription contract.

3.2 SubscriptionDentalCare Receipt

A receipt is sent back to the user when the request has been received correctly. The receipt does not contain any specific parameters, just the request id and organization number in order to match the response with the request.

3.2.1 Message and translation

The parameters and translation are shown in the table below:

SAP	XML				Transformation info		Details	
Parameter	Name	Element / Attribute	Optional	Data type	Comp.	Transformation	Description	Comments
	request-id	Attribute		char (36)			ID used to link the response with the request.	This value must be copied from the "request-id" message on the inbound request XML message.
	organization-number	Attribute		int (10)			The care provider's organization number.	This value must be copied from the "organization-number" message from the inbound request XML message.

Table 4 Overview over the parameters and their translation for a SubscriptionDentalCareNotification receipt



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3.2.2 Sample XML

The following sample demonstrates a possible response returned synchronously:

```
<FK.TV.ReceiptResponse
  xmlns="http://fk.se/SHS/xsd/tanden"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://fk.se/SHS/xsd/tanden ../TandenTypes.xsd"
  request-id="a4924e42-4214-ba93-af22-98739237ba23"
  organization-number="2412912421"/>
```

Figure 8 Sample XML for the ReceiptResponse message

3.3 SubscriptionDentalCareNotification Response

The SubscriptionDentalCareNotification Response to the SHS message queue is used to indicate that a subscription has been successfully created or ATB/STB has been assigned to an existing subscription. If an error occurred an error message will be provided, see ch.3.4.

These responses are sent synchronously from SAP-CRM to SHS but asynchronously from the dental journal systems point of view.

3.3.1 Message and translation

SAP-XML	XML				Transformation info		Details	
Parameter	Name	Element / Attribute	Optional	Data type	Comp.	Transformation	Description	Comments
IRequestId	request-id	Attribute		char (36)			ID used to link the response with the request.	This value must be copied from the "request-id" message of the inbound request XML message.
EStatus							Internal status from SAP-CRM used by SHS to determine which xml structure to use. Valid values: S=Success	If status=S, this xml structure is used. If status=E, the xml structure for error message is used, see ch.3.4.
	organization-number						The care provider's organization number	This value must be copied from the "organization-number" parameter in the inbound request XML message.
	clinic-id						The id that the clinic has been assigned by FK.	This value must be copied from the "clinic-id" parameter in the inbound request XML message.

SAP-XML	XML				Transformation info		Details	
Parameter	Name	Element / Attribute	Optional	Data type	Comp.	Transformation	Description	Comments
EContractId2	contract-id	Element		int (7-10)	No	No	The ID of a new or existing contract.	New contracts will be created with length=10 digits while existing contracts uses 7 digits.
EAtbclaimAmount	total-reimbursement-amount	Element		int (13)	No	No	The total amount of the ATBs and STB claimed	
EClaimId	rfr-id	Element	X	int(10)			The unique identifier of the RFR-id that was created in the Dental Care System.	The payment spec. uses the RFR-id as identifier for the reimbursement. RFR = Request For Reimbursement Swedish translation of RFR: BTB = Begäran om TandvårdsBidrag
EClaimStatus	rfr-status	Element	X	char(1)			The status for the RFR. Valid values: A=Approved M=Manual handling	
EzcrmComment\item\	commentary	Complex Type	X				This is an information and warning field.	
EzcrmComment\item\ ECommentaryNumber	commentary/id	Attribute		int(10)	No	No	A unique identifier for the line item in the submitted collection.	
EzcrmComment\item\ ECommentaryMessage	commentary/code	Element		int(3)	No	No		

SAP-XML	XML				Transformation info		Details	
Parameter	Name	Element / Attribute	Optional	Data type	Comp.	Transformation	Description	Comments
EzcrmComment\item\ECommentaryDetail	commentary/ commentary	Element		char(255)	No	No		

Table 5 Overview over the parameters and their translation for the SubscriptionDentalCareNotification Response

3.3.2 Sample XML

The following is an example of a response for a request with a new subscription contract and RFR.

```
<FK.TV.GetMessageResponse request-id="00000001-1000-0000-0000-000000000005"
organization-number="2021005521" xmlns="http://fk.se/SHS/xsd/tanden">
  <SubscriptionDentalCareNotificationResponse.v4 request-id=
    "597bdbbd-351b-4fc6-946f-3c1ac392de17">
    <contract-id>5002174</contract-id>
    <total-reimbursement-amount>300</total-reimbursement-amount>
    <rfr-id>8000020351</rfr-id>
    <rfr-status>A</rfr-status>
  </SubscriptionDentalCareNotificationResponse.v4>
</FK.TV.GetMessageResponse>
```

Figure 9 Sample XML for a SubscriptionDentalCareNotification response



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The following is an example of a response for a request with changed end-date.

```
<FK.TV.GetMessageResponse request-id="b1234e42-4214-ba93-af22-9ac821222ba2"
organization-number="2929291234" xmlns="http://fk.se/SHS/xsd/tanden">
  <SubscriptionDentalCareNotificationResponse.v4
request-id="a4924e42-4214-ba93-af22-98739237ba23">
    <contract-id>5222444</contract-id>
    <total-reimbursement-amount>0</total-reimbursement-amount>
    <commentary id="1">
      <code>866</code>
      <commentary>Tandvårdsbidrag som var tillgängliga efter det nya slutdatumet och
har begärts eller utbetalats kommer att avskrivas eller återkrävas.</commentary>
    </commentary>
    <commentary id="2">
      <code>872</code>
      <commentary>Patientbesök som ingått i abonnemangsavtalet kan behöva korrigeras
bort av er och skickas in på nytt.</commentary>
    </commentary>
  </SubscriptionDentalCareNotificationResponse.v4>
</FK.TV.GetMessageResponse>
```

Figure 10 Sample XML for a SubscriptionDentalCareNotification response

IT-product

Date

Version

SubscriptionDentalCare v4

2018-06-04

RevG

The following is an example of a response for a request to cancel a subscription contract.

```
<FK.TV.GetMessageResponse request-id="b1234e42-4214-ba93-af22-9ac821222ba2"
organization-number="2929291234" xmlns="http://fk.se/SHS/xsd/tanden">
  <SubscriptionDentalCareNotificationResponse.v4
request-id="a4924e42-4214-ba93-af22-98739237ba23">
    <contract-id>5222444</contract-id>
    <total-reimbursement-amount>0</total-reimbursement-amount>
    <commentary id="1">
      <code>872</code>
      <commentary>Patientbesök som ingått i abonnemangsavtalet kan behöva korrigeras
      bort av er och skickas in på nytt.</commentary>
    </commentary>
    <commentary id="2">
      <code>873</code>
      <commentary>Om tandvårdsbidrag har begärts eller utbetalats kommer dessa att
      avskrivas eller återkrävas.</commentary>
    </commentary>
  </SubscriptionDentalCareNotificationResponse.v4>
</FK.TV.GetMessageResponse>
```

Figure 11 Sample XML for a SubscriptionDentalCareNotification response

3.3.3 Information messages

The following table shows possible information messages for the SubscriptionDentalCareNotification Interface.

Code	Description
816	Just nu har vi långa handläggningstider för ärenden där vi utreder om patienten har rätt till svensk socialförsäkring.
843	Ärendet handläggs manuellt för att fastställa om patienten har rätt till statligt tandvårdsstöd, dvs. rätten till tandvårdsersättning och tandvårdsbidrag utreds.
857	Patienten är inte registrerad som försäkrad hos Försäkringskassan. Begäran om tandvårdsbidrag kommer eventuellt att gå till manuell handläggning.
866	Tandvårdsbidrag som var tillgängliga efter det nya slutdatumet och har begärts eller utbetalats kommer att avskrivas eller återkrävas
872	Patientbesök som ingått i abonnemangsavtalet kan behöva korrigeras bort av er och skickas in på nytt
873	Om tandvårdsbidrag har begärts eller utbetalats kommer dessa att avskrivas eller återkrävas
874	Ärendet handläggs manuellt för att fastställa om patienten har rätt till statligt tandvårdsstöd
876	Patienten är inte registrerad som försäkrad hos Försäkringskassan.
877	Patienten är registrerad i Försäkringskassan från och med YYYY-MM-DD.

Table 6 List of possible information messages for SubscriptionDentalCareNotification

3.4 SubscriptionDentalCareNotification Error response

An error response is sent if there is a technical problem or if the header validation fails. Technical errors could be sent directly from SHS, but header validation errors are sent from SAP-CRM.

Error messages are sent back synchronously from SAP-CRM, but asynchronously from the dental journal systems point of view

3.4.1 Message and translation

SAP-XML	XML				Transformation info		Details	
Parameter	Name	Element / Attribute	Optional	Data type	Comp.	Transformation	Description	Comments
IRequestId	request-id	Attribute		char (36)			ID used to link the response with the request.	This value must be copied from the "request-id" message of the inbound request XML message.
EStatus							Internal status from SAP-CRM used by SHS to determine which xml structure to use. Valid values: E=Error	If status=R, this xml structure is used.
	organization-number						The care provider's organization number	This value must be copied from the "organization-number" parameter in the inbound request XML message.

SAP-XML	XML				Transformation info		Details	
Parameter	Name	Element / Attribute	Optional	Data type	Comp.	Transformation	Description	Comments
	clinic-id						The id that the clinic has been assigned by FK.	This value must be copied from the "clinic-id" parameter in the inbound request XML message.
EZclaimMessage\item\	error	Complex Type						The error response can be repeated multiple times.
EZclaimMessage\item\ EErrorNumber	error/ error-code	Element		int (3)	No	No	The unique code for the type of error that has occurred	
EZclaimMessage\item\ EErrorMessage	error/ error-text	Element		char (255)	No	No	The header/short description of the error	
EZclaimMessage\item\ EErrorDetail	error/ error-details	Element	X	char (255)	No	No	A more detailed description of the error.	

Table 7 Overview over the parameters and their translation for an Error response

3.4.2 Sample XML

The following example demonstrates a possible error message returned asynchronously from SHS:

```
<FK.TV.GetMessageResponse request-id="b4924e42-4214-ba93-af22-98739ba21312"
organization-number="8421812392" xmlns="http://fk.se/SHS/xsd/tanden">
  <ErrorMessage request-id="a4924e42-4214-ba93-af22-98739237ba23">
    <error>
      <error-code>821</error-code>
      <error-text>Abonnemangsavtals-ID kunde inte hittas</error-text>
      <error-details></error-details>
    </error>
  </ErrorMessage>
</FK.TV.GetMessageResponse>
```

Figure 12 Sample XML for s SubscriptionDentalCareNotification Error response

3.4.3 Error Messages

The following table shows the possible error messages for the SubscriptionDentalCareNotification Interface:

Code	Description	Source
001	Connection Error	Any
002	Technical Error	Any
003	Invalid XML	SHS
004	Vi har just nu tekniska problem. Du ska inte skicka om din begäran utan vi kommer att hantera denna när våra problem är lösta.	SHS
801	Obligatoriska parametern <parameter> saknades	CRM
802	Parametern <parameter> är i ett ogiltigt format.	CRM
803	Avtal kan inte registreras för tillfället, var god försök igen senare	CRM
804	Ändra så att antal intakta tänder är färre än, eller lika med, antalet kvarvarande tänder	CRM
811	Mottagnings-ID kunde inte hittas	CRM
812	Patienten kunde inte hittas	CRM
813	Vårdgivar-ID kunde inte hittas	CRM
814	Användaren kunde inte hittas	CRM
815	Ogiltigt tillstånd	CRM
821	Abonnemangsavtals-ID kunde inte hittas	CRM
823	Begärt ATB är inte tillgängligt	CRM
824	Patienten har inte tillräckligt många ATB tillgängliga	CRM
825	Ogiltigt start- och slutdatum	CRM

Code	Description	Source
826	Relationen mellan vårdgivare och mottagning kunde inte hittas	CRM
831	Patienten är inte längre registrerad för statligt tandvårdsstöd	CRM
832	Abonnemangsavtal eller BTB Avtal är redan inskickat	CRM
833	Uppgift om kontonummer saknas	CRM
835	Patienten är för ung för att få statligt tandvårdsstöd	CRM
850	Mottagningen eller vårdgivaren är inte aktiv för hela abonnemangstiden	CRM
851	Contract-ID existerar inte för Patient-ID	CRM
852	ATB/STB är redan begärt och handläggs manuellt	CRM
853	Uppgift om antal kvarvarande och intakta tänder saknas	CRM
856	STB är inte tillgängligt	CRM
858	Det finns redan ett abonnemangsavtal för patienten	CRM
859	Det finns redan ett inskickat abonnemangsavtal inom angiven tidsperiod	CRM
860	Abonnemangsavtalets startdatum är inte giltigt	CRM
861	ATB/STB kan inte begäras utanför abonnemangsavtalets giltighetsperiod	CRM
862	ATB/STB kan inte begäras eftersom avtalet inte är i status "Skicka in"	CRM
863	Vårdgivaren (org.nr) måste vara samma som skickade in avtalet	CRM
864	Abonnemangsavtal med startdatum mer än <X> månader framåt i tiden kan inte skickas in. (X= configurable parameter in TVARVC, 2017-01-01 set to "6")	CRM
867	Abonnemangsavtalet är annullerat	CRM
868	Abonnemangsavtalet kan inte skickas in då patienten inte omfattas av statligt tandvårdsstöd under hela tidsperioden	CRM
869	Abonnemangsavtal som inte längre gäller kan inte annulleras eller avslutas i förtid	CRM
870	Abonnemangsavtalets giltighetstid kan inte vara längre än tre år	CRM
871	Abonnemangsavtalets slutdatum kan inte vara före startdatum	CRM
875	För framtida abonnemangsavtal kan slutdatum inte ändras	CRM

Table 8 List of error messages for SubscriptionDentalCareNotification

4 Integration 2 – push response

The second integration describes the asynchronous response sent back to the dental system mailbox.

4.1 SubscriptionDentalCareNotification Push response

The interface is invoked by SAP-CRM when a claim has been processed and the initial status was M (Manual handling). This means that no final decision about the claim has been taken yet. This push response is sent when the claim has been handled manually and received a final status.

SubscriptionDentalcare.v4 uses push response v4.

4.1.1 Message and translation

SAP	XML				Transformation info		Details	
Parameter	Name	Element / Attribute	Optional	Data type	Comp.	Transformation	Description	Comments
IRequestId	request-id	Attribute		char (36)			ID used to link the response with the request.	This value must be copied from the "request-id" message on the inbound request XML message.
EStatus							Internal status from SAP-CRM used by SHS to determine which xml structure to use. Valid Values: S=Successful response	If status=S, this xml structure is used.
IOrgNum							The organizational number for the care provider.	This value will also be set as a SHS property.

SAP	XML				Transformation info		Details	
Parameter	Name	Element / Attribute	Optional	Data type	Comp.	Transformation	Description	Comments
IClinicId							The id that the clinic has been assigned by FK.	Used to place the message in the right mailbox in in SHS.
EContractId2	contract-id	Element		int(7-10)	No	No	The ID of a new or existing contract.	New contracts will be created with length=10 digits while existing contracts uses 7 digits.
EAtbclaimAmount	total-reimbursement-amount	Element		int (13)	No	No	The total amount of the ATBs and STB claimed	
EClaimId	rfr-id	Element		int(10)			The unique identifier of the RFR-id that was created in the Dental Care System.	The payment spec. uses the RFR-id as identifier for the reimbursement.
EClaimStatus	rfr-status	Element		char(1)			The status for the current RFR. Valid values: A = Approved D = Declined	
EZcrmComment\item	commentary	Complex Type	X				This is an information and warning field.	Information messages in Table 6.
EZcrmComment\item\ECommentaryNumber	commentary/id	Attribute		int(10)			A unique identifier for the line item in the submitted collection.	
EZcrmComment\item\ECommentaryMessage	commentary/code	Element		int(3)				
EZcrmComment\item\ECommentaryDetail	commentary/commentary	Element		char(255)				

Table 9 Overview over the parameters and their translation for the SubscriptionDentalCareNotification Push response

4.1.2 Sample XML

The following is an example of a push-response for a declined RFR.

```
<FK.TV.GetMessageResponse request-id="00000001-1000-0000-0000-000000000005"
organization-number="2021005521" xmlns="http://fk.se/SHS/xsd/tanden">
  <SubscriptionDentalCareNotificationResponse.v4 request-id=
  "597bdbbd-351b-4fc6-946f-3c1ac392de17">
    <contract-id>5002173</contract-id>
    <total-reimbursement-amount>0</total-reimbursement-amount>
    <rfr-id>8000020350</rfr-id>
    <rfr-status>D</rfr-status>
  </SubscriptionDentalCareNotificationResponse.v4>
</FK.TV.GetMessageResponse>
```

Figure 13 Sample XML for a SubscriptionDentalCareNotification response with a declined RFR

5 Volumes

The following data is based on the total traffic during Mars 2018 (31 days).

Distribution to be spread throughout the day, but likely to be more load during the workday hours.

Received SubscriptionDentalCareNotification requests:

per Year	per Month	per Day	per Hour	Size
897 996	74 833	2 413	100	~5 kb

Table 10 Preliminary forecast for the volumes of the SubscriptionDentalCareNotification message